VOL. XIV.

94231

# TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, [redacted] 1921

Term No. [redacted]257

CHARLES D. NEWTON, AS ATTORNEY GENERAL OF THE STATE OF NEW YORK, EDWARD SWANN, AS DISTRICT ATTORNEY OF THE COUNTY OF NEW YORK AND LEWIS NIXON, CONSTITUTING THE PUBLIC SERVICE COMMISSION OF THE STATE OF NEW YORK, FIRST DISTRICT, APPELLANTS,

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK, RESPONDENT.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED MARCH 17, 1921

(File No. 28144.)

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CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 35827

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, February 10, 1920.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 35827
MR. O'BRIEN, of Counsel for defendant Swann.

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The Master: In view of a statement just made by Mr. O'Brien I want it noted on the record that on entering the room I asked Judge Ransom how long he would be with Mr. Little. He said he did not expect to go ahead with Mr. Little. I told him that I did expect him to go ahead with Mr. 35829
Little. That was the only conversation that was had.

Mr. O'Brien: I had reference not to anything you said, I had reference to a statement Judge Ransom just made without addressing it to those that are engaged in this case, in reference to whether he would go on with the coke oven stuff or not.

The Master: I don't know anything about that, but I assumed from what you said that

35830

you were making some reference to the talk that Judge Ransom was having with me.

Mr. O'Brien: No, I only heard his statement that it would take a lot of time to go into this coke oven stuff. That is the only thing I heard, and I think it is a fair suggestion to make, that if he has anything to say he should say it at the counsel table.

Mr. Ransom: I did say it at the counsel table, and if you had been over here you would have heard it.

Mr. O'Brien: No, you didn't say it at the
35831 counsel table, you said it under your breath. Let us have it understood clearly here just how these things are to be done, so that we can get along harmoniously. In other words, if you have anything to say to the Master about how he is to conduct this case I want it said right here on the record, right in open court. This is not the first time you have done it, you almost whispering in the Master's ear as he was about to sit down, you were following him along.

Mr. Ransom: That is another cowardly statement on your part.

Mr. O'Brien: I will have something to say to
35832 you before we get through with this.

Mr. Ransom: I have not been called a coward, anyway, as you have.

The Master: Come, let us proceed.

Mr. O'Brien: Judge Ransom asked me yesterday if I would have Mr. Little here today, and I have him here today, and if it is not going to serve some particular convenience of the Court and counsel I would like to have him go on, or I would like to have indicated when they may call him, because I can use the time very profitably.

35833

The Master: I intend to go on with Mr. Hine, and I expect to call Mr. Little then.

Mr. Ransom: Has Mr. Little's direct been finished?

The Master: I understand so, and I expect Judge Ransom to proceed with the cross-examination.

Mr. O'Brien: There was not a definite arrangement as to our having finished his direct.

The Master: Haven't you finished his direct?

Mr. O'Brien: There were some matters that are to be gone into that won't take very long.

35834

The Master: Then I want you to finish his direct.

Mr. O'Brien: That I want to do today.

The Master: Then I will not press the cross-examination. I was trying to press on the cross-examination and get through, and you come along and put me in a position in which I can't do it.

Mr. O'Brien: I only ask you to take up our witnesses in the same way as was done with the witnesses for the complainant.

The Master: I understood that Mr. Little was through.

35835

Mr. O'Brien: He is not through; there are some little matters that I think will not require much research on the part of the complainants for cross-examination.

The Master: The minute you are through with Mr. Little I will force Judge Ransom to proceed with the cross-examination.

Mr. Ransom: I will proceed.

Mr. O'Brien: I only want to know whether I will have until recess to go over some matters, or if Mr. Hine is going to take all day. I

35836

want to know, because I was up pretty late last night conferring with witnesses.

The Master: I am sure I can't tell you how long this cross-examination of Mr. Hine will take. Perhaps Judge Ransom can tell you.

Mr. Ransom: I really don't know.

Mr. O'Brien: In regard to the cross-examination, as you will recall when Mr. Little first went on the stand he was to be cross-examined as to the matters he had been testifying about.

The Master: All right, I will dispose of that as I have indicated. I appreciate that Judge Ransom has been ill, but there are other counsel, the cross-examination should have been prepared. I ordered Mr. Little on for yesterday, with the understanding that he was to proceed. There was an inquiry made yesterday whether Mr. Little would be here, so I assumed that meant they would proceed. When Mr. Little's direct-examination is finished I shall insist upon their proceeding.

35837

Mr. Ransom: I shall proceed.

Mr. O'Brien: We were already in the cross-examination, if you recall.

Mr. Ransom: We were on the direct-examination of Mr. Little.

35838

The Master: No, you had started on your cross-examination of Mr. Little.

Mr. Ransom: And they resumed the direct.

The Master: Go on with Mr. Hine. I will dispose of this when I get to it.

WILLARD F. HINE recalled.

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Hine, in connection with Defendants' Exhibit AA-304, have you the size and length of main that would be required in each instance if the mains of the Consolidated Gas Company as they exist were replaced by a single main of equivalent capacity on each side of the street?

A. I have.

Q. Have you computed the cost of such equivalent mains as compared with the cost of the existing mains, 35840
based on the units used in the appraisal of 1884?

A. I have.

Q. Will you please state the result of those computations?

Mr. Ransom: I object to the question as incompetent and immaterial. It affords no basis for anything helpful in this case. These mains were laid under varying conditions from 1884 down, or prior to 1884. They were laid in the exercise of the best judgment of the company under the conditions and the demands as they existed at that time. The question of what it would cost now to take out these old mains and 35841
put in a single main of an increased size, figuring that on the basis of what it would have cost to do that work in 1884, is hypothetical, and of no possible bearing. That is not the way a system of mains develops.

The Master: The question called for what it would have cost in 1884 to do that?

Mr. Chambers: No, based upon the units as used in the appraisal of 1884.

The Master: That is the same thing, isn't it? I will sustain that objection. I thought your question was what it would cost to do it now.

Mr. Chambers: It does not relate to time at all, my question.

The Master: I know, but it is based upon what it would have cost under the units of 1884.

Mr. Chambers: No, that isn't it.

The Master: That is the way I understand it.

Q. As of what time—

The Master: What difference does it make what time if you use a unit of 1884 value? Am I not right, Mr. Hine, in my understanding of the question? The question calls for an answer by you as to what it would cost to put in single mains on the price of 1884.

35843

The Witness: The price used in that appraisal; yes, sir.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Have you computed the cost of the mains of the Consolidated System Companies as shown on Exhibit AA-304, as compared with the cost of the existing mains based on the units used in the appraisal of 1884?

The Master: I don't understand that question.

Mr. Chambers: Well, it is the same as the other, except that I mention the Consolidated System Companies here.

35844

The Master: I will sustain the objection.

Mr. Chambers: Exception.

Q. Can you give me the results of your calculations basing your comparative costs on the units used in the appraisal of 1884?

The Master: The same ruling.

Mr. Chambers: Exception. That is all.

CROSS-EXAMINATION BY MR. RANSOM:

Q. Mr. Hine, in the course of your public duties and otherwise, have you not tried to keep informed

of the experience of gas companies in large cities throughout the country with respect to mains?

A. Yes, sir.

Q. And you read from time to time the statistics published in the various technical gas publications with respect to the experience of the different companies?

A. I read a good many of those publications.

Q. And the reports of the various state public utility commissions on those subjects, and their decisions?

A. Well, I don't recollect whether I have ever read 35846
anything on those particular subjects from that source.

Q. Since you were in St. Louis have you to some extent kept informed as to conditions and experiences there?

A. Well, to some extent; rather limited.

Q. Have you not learned that the annual gas sales per mile of mains in St. Louis during 1918 were about 6,468,170 cubic feet of gas?

Mr. Chambers I object to that.

The Master: Objection overruled.

A. No.

Q. What was the average annual sale per mile of 35847
mains in St. Louis when you were there?

A. I don't know, I haven't those figures.

Q. You never studied that?

A. I have, yes.

Q. Have you any idea what the St. Louis figure is?

A. No.

Q. Are you familiar with the figures sent out in Brown's Directory on that subject regarding this company with which you say you were formerly connected?

A. No.

By the Master:

Q. What is Brown's Directory?

A. That is a compilation of information relating to gas companies.

Q. It is accepted generally as a standard work?

A. Well, it is the reports of the companies. It is generally accepted as pretty accurate on certain matters, yes.

Q. On this matter?

A. I would not doubt the main mileage and the sendout, and such things.

35849 Q. As reported in Brown's Directory?

A. Yes.

By Mr. Ransom:

Q. And also as to sales?

A. Yes.

Q. That is, as to matters like main mileage, and sales, and sendout, and prices chargeable under public authority, you would not doubt the accuracy of Brown's Directory figures?

A. No, I have used Brown's Directory figures in a good many cases, and have checked them up a good many times, and I have always found them substantially accurate.

35850 The Master: Have you got Brown's Directory here?

Mr. Ransom: It is on its way up here.

Mr. O'Brien: Your Honor, I think we are getting far afield when we get into that red book of Brown's.

Mr. Goetz: It is not a red book.

Mr. O'Brien: I think it is going pretty far to prove this case.

The Master: That may be, but I am going to let them use it on cross-examination and spread on the record what Brown says the minute I get proof that it is a standard and acceptable work.

Mr. O'Brien: Well, you know how those things go.

The Master: Yes, but it is the best we can do.

Mr. O'Brien: You would not want to take standard statistics from us as to the Consolidated Gas Company, and all the money they have and are making. If we attempted to do that they would immediately demur.

The Master: But I will probably take Brown's statistics as to the amount of mains and the send-out.

Q. Have you learned from any source that the annual gas sales per mile of main in Providence, Rhode Island, during 1918 were, about 4,725,000 cubic feet of gas? 35852

Mr. Chambers: I object to that on the same ground. We are not concerned with Rhode Island.

The Master: Objection overruled.

Mr. Chambers: Exception.

A. No.

Q. Or that the annual gas sales per mile of main in the territory served by the Public Service Corporation of New Jersey during 1918 was 4,775,000 cubic feet? 35853

Mr. Chambers: I object to that as incompetent, immaterial and irrelevant. He is wandering all over the United States. The conditions are not the same.

The Master: Well, he is getting closer to New York all the time.

Mr. Chambers: Exception.

Mr. O'Brien: I object to his reading these things into the record. I think we had better wait for Brown's mixture.

The Master: Objection overruled.

Mr. O'Brien: Exception.

The Master: I don't think it is really a good way to do it, if he says he doesn't know what the figures are. I will allow this one question. You don't know the figures for New Jersey, do you?

The Witness: No.

The Master: Eliminate the figures. I think they are right about it.

Mr. Ransom: I will pass it until we get the book.

35855 Q. In connection with the preparation of this Exhibit AA-304, and the other exhibits which have been put in or prepared by Prof. Maltbie and yourself and staff, have you learned or computed the annual gas sales per mile of main of the Consolidated Gas Company during 1918?

A. In the first place I don't know any Prof. Maltbie.

Q. Your acquaintance is limited.

The Master: Well, I assume he means Mr. Maltbie, or Dr. Maltbie, Milo R. Maltbie.

Mr. O'Brien: No, mile o'main he is asking now.

(Question read by stenographer.)

35856 A. No, I don't believe I have from those sources. I have had those figures; I haven't got them in mind.

Q. Is not the figure approximately 22,684,000 cubic feet of gas per mile of main for 1918?

A. I have not divided it through.

Q. Have you any idea of what it is?

Q. I haven't the figure in mind.

Q. For any year?

A. Not for any year.

Q. For any company?

A. No.

Q. Anywhere in the country?

A. I don't think I have the figure in my mind, no.

Q. That is to say, you made up a table which you say shows what you are willing to characterize as duplication of mains of the Consolidated Gas Company without having studied gas making capacities in this or any other city in relation to output?

A. No, sir; I have studied this.

Q. What studies have you made?

A. I have studied that in Minneapolis.

Q. Well, what is the Minneapolis figure?

A. I can't say; I haven't those figures in mind. 35858

Q. Did you check it up before you made up this statement?

A. No.

Q. If Brown's Directory shows that the annual gas sales per mile of main in Minneapolis during 1918 were 495,150 cubic feet of gas would that accord with your recollection?

A. I haven't a recollection on that; I haven't those figures in mind.

Q. Haven't you any recollection as to what figures were the result of your studies in Minneapolis?

A. No, I have not.

Q. You cannot say whether it was four or twenty- 35859
four millions?

A. Well, it would be between those. I haven't the figures in mind, it would be just guessing around. I have not carried those figures, and I have not studied those figures in making up this, I didn't use them.

Q. When did you make your Minneapolis studies?

A. A little over a year ago.

Q. And you did not examine those studies before you made up this table?

A. I did not study the sales per mile of main anywhere before I made this table. That had no bearing

on the situation at all, and does not, in my mind, have any bearing.

Q. Haven't you made an affidavit on this matter regarding Minneapolis within the past month or two?

A. No, sir.

Q. Not at all with respect to the Minneapolis Gas Company?

A. Oh, yes, but not on this matter.

Q. In what other cities have you studied the relation of main mileage to output and sales?

A. At one time I made up an analysis of practically
358(1 all the companies where the data was shown in Brown's Directory.

Q. When was that?

A. I think in 1911 or 1912.

Q. Where is that study now?

A. I don't know, but probably in the files of the Commission somewhere.

Q. Will you produce it?

A. I don't know that I can.

Mr. Chambers: No, we won't produce it.

Mr. Ransom: Will counsel to the Commission produce it?

Mr. Clark: I can't tell you.

358(2 Mr. O'Brien: Judge Ransom, I want to say we are getting dangerously near the relation between attorney and client, your former relation with Mr. Hine, you are just getting into that.

Mr. Ransom: That is the worst accusation you have yet made about me in this case.

Mr. O'Brien: I am very frank, I don't want to say it behind your back, I want to say it to you.

Mr. Ransom: I call on counsel for the Public Service Commission to produce from the files the study made by this witness.

The Master: There is a perfectly simple way of getting it, subpoena the Commission to produce it.

Mr. O'Brien: That is of 1911 or 1912?

Mr. Ransom: 1911, or whenever it was. He says it was about that time.

Q. With respect to Exhibit AA-304, Mr. Hine, is it not a fact that on each of the avenues or streets for which you show the location of the mains on sheets numbered 1 to 11, comprising this Exhibit AA-304, that there are and have been for many years, underground trolley street railroads in each of those 35864
avenues or streets, except on Fifth Avenue, from Tenth Street to 58th Street, shown on Sheet 8, and 27th Street from First Avenue to Tenth Avenue, shown on Sheet 9?

A. Yes, I believe there are trolley lines in all those instances, street car lines with underground trolleys.

Q. And Fifth Avenue is one of the most congested streets, so far as vehicular traffic is concerned, that there is in the City, is it not?

A. I believe so.

Q. As to 27th Street, do you not also know that until recently a street railroad was operated on 27th Street?

35865

A. I can't say, really I am not familiar.

Q. Don't you know the 27th and 28th Streets crosstown railroad lines on those streets?

A. No, I can't remember about that, I am sure.

Q. On each of the streets railway lines having underground trolley tracks there are two sets of tracks for street cars, that is, one each way, north bound and south bound, and east bound and west bound?

A. Generally, I believe.

Q. With the exception of 27th Street, where there was a one-way track?

A. Well, I have not studied that.

Q. On these streets, in addition to the underground trolley system are there not many subsurface structures for water, sewers, electric transmission lines, various ducts for telegraph and telephone signal wires, electric current, etc.?

A. Undoubtedly.

Q. On this Exhibit AA-304, Mr. Hine, did you intend in any way to imply that the mains marked by you as N. A.—that is New Amsterdam Gas Company, Std.—Standard Gas Light Company, and Mutual—that is the New York Mutual Gas Light Company—belong or were claimed to belong to the Consolidated Gas Company or were a part of its property on which the Consolidated claimed a return in this case?

35867

A. No, we just took those notations as shown on the main maps of the Consolidated Company, and it was my understanding that those marked N. A. belonged to the New Amsterdam Company, and were not claimed by the Consolidated.

Q. And the same way with the other companies?

A. Yes. I don't know about that, though; I have not investigated as to what specific mains are owned by the Consolidated.

35868

Q. Have you made up any exhibit or any sheet showing with respect to the streets and avenues covered by Exhibit AA-304 the mains which belong to the Consolidated alone, eliminating those which belong to other companies?

A. I have not.

Q. I show you these blueprint diagrams, Sheets Nos. 1 to 11, corresponding to your sheets Nos. 1 to 11, showing the same streets and avenues, and I ask you whether that does not appear to show the same things as to the Consolidated mains alone, those of other companies eliminated.

A. Do you mean from the title?

Q. No, just look at the streets. You are familiar with the streets?

A. You want each one checked up absolutely?

Q. Yes.

A. They do.

Q. They show the Consolidated mains alone in those streets?

A. Yes.

Q. And you have checked it up with your exhibit?

A. Yes.

Mr. Ransom: I offer them in evidence. 35870

Mr. Chambers: Who made this up?

Mr. Ransom: It was prepared by the Main Department of the complainant company.

The Master: Mr. Hine has checked it and says it is right.

Mr. Chambers: I object to it as incompetent, immaterial and irrelevant, and not the proper time to offer exhibits in evidence, out of order.

The Master: Objection overruled.

Mr. Chambers: Exception.

Blueprint diagrams received in evidence and marked Complainant's Exhibit 466.

Q. Mr. Hine, I now show you Brown's Directory for 1919, the statistics regarding the Minneapolis Gas Light Company of Minneapolis to which you referred, and ask you whether from it you can refresh your recollection and compute the annual sales of that company per mile of mains? 35871

The Master: I don't think I would bother with Mr. Hine's recollection about it.

Mr. Ransom: Let him compute it.

The Master: Will you please state, looking at Brown's Directory, what it was? You have said it is an accurate report.

35872 Willard F. Hine, Cross.

Q. What were the annual sales of the Minneapolis Company?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial and hearsay.

The Master: Objection overruled.

Mr. Chambers: Exception.

A. It does not give it; it gives it approximately.

Q. What are the approximate annual sales?

Mr. Chambers: If the Master please, I don't think this—

The Master: I think it is the best evidence we can get from a reliable source.

35873 Mr. Ransom: And the witness has certified to it.

The Master: I am going to take it.

Mr. Chambers: Exception.

Mr. O'Brien: The book is in evidence now?

The Master: You can use the book if you want to.

Mr. Goetz: The book is not in evidence.

The Master: But they can use the same book.

Mr. Chambers: You are using it, and that is the rule you used to invoke on us.

Mr. Goetz: The witness is refreshing his recollection from it.

35874 The Master: Not at all. You are using this book, and they can use it, too.

A. They give the annual sales for the Minneapolis Gas Light Company of Minneapolis, in the 1919 Brown's Directory, which I believe is supposed to give the information for the year 1918, annual sales approximately 2,888,855 cubic feet.

Q. And 583 miles of mains?

A. Approximately.

Q. Making an annual sale per mile of main of approximately 5,000,000 cubic feet, more accurately 4,955,150, or thereabouts?

Mr. Chambers: I make the same objection.

The Master: The same ruling.

Mr. Chambers: Exception.

A. It is approximately 5,000,000, as close as I can get at it roughly, 4,950,000.

Q. What was the maximum day's output?

Mr. Chambers: I object to that as being incompetent, immaterial, irrelevant and hearsay, and no bearing on the issues in this case.

The Master: Objection overruled.

Mr. Chambers: Exception.

A. Maximum day's sendout, 9,852,000 cubic feet, as shown by this volume. 35876

Q. How does that compare with the mileage?

Mr. Chambers: I make the same objection.

Compared with what mileage?

Mr. Ransom: The 583 mile mileage.

The Master: Objection overruled.

Mr. Chambers: Exception.

A. Dividing the maximum day's sendout by the main mileage it is 16,920, approximately, which would be the maximum day's sendout per mile of main.

Q. Now, go back to the City of St. Louis, the Laclede Gas Company, what do you find the annual gas sales per mile of main were in St. Louis during 1918? 35877

Mr. Chambers: I make the same objection that it is incompetent, irrelevant and immaterial, and hearsay, and not proper cross-examination.

I did not ask him anything about day's make in St. Louis or Minneapolis, nor did I ask him any questions whatsoever concerning Brown's Directory of American Gas Companies, Gas Statistics, 1919.

Mr. Ransom: You did try to destroy a considerable part of this company's investment by showing duplication of mains.

The Master: Objection overruled.

Mr. Chambers: Exception.

The Master: What is your answer as to St. Louis?

The Witness: According to Brown's Directory the annual sales per mile of main are approximately 6,470,000 cubic feet.

Q. What is the relation to maximum day's send-out in St. Louis?

Mr. Chambers: I make the same objection.

Mr. O'Brien: Judge, I would like to know
35879 about what category you put this class of testimony in?

The Master: It is cross-examination on his testimony.

Mr. O'Brien: I mean as to its force and effect.

The Master: I don't know clearly, but I assume it is intended to show that the witness's testimony that there is a duplication of mains is unfounded, that the tremendous quantity of gas that goes through the mains requires all the mains they have.

Mr. Ransom: Here is a company that is sell-
35880 ing four to six times per mile of main as much gas as these other companies.

Mr. O'Brien: We have a congested city here.

Mr. Ransom: And they claim that these mains are duplicated.

Mr. Chambers: To this last question I object on the ground that it is incompetent, irrelevant and immaterial, hearsay, secondary evidence, no foundation laid for it, and not proper cross-examination.

The Master: Same ruling.

Mr. Chambers: Exception.

The Master: What is the answer, Mr. Hine?

The Witness: The sendout on the maximum day is approximately 24,500 cubic feet per mile of main, as shown by Brown's Directory.

Q. What about Chicago, what is the relation of main mileage to annual sales?

Mr. Chambers: Chicago is a pretty big place.

Mr. Ransom: So is New York.

Mr Chambers: I object to the question as to Chicago on the ground that it is indefinite, incompetent, immaterial and irrelevant, secondary evidence, hearsay, no foundation laid for it, not 35882
proper cross-examination, and I take an exception.

A. According to the figures in Brown's Directory the annual sales per mile of main, including high pressure and low pressure main, was approximately 8,850,000 cubic feet.

Q. At Chicago?

A. At Chicago. The maximum day's sendout is approximately 34,400 cubic feet per mile of main.

Q. How about the sales of the Public Service Gas Company of New Jersey?

A. Which division, the Bergen Division, or the entire? The Bergen Division, then the Hudson Divi- 35883
sion?

Q. Yes.

The Master: All of it?

Mr. Ransom: All of it.

Mr. Chambers: Same objection.

The Master: Same ruling.

Mr. Chambers: Exception.

A. For the Public Service Gas Company, the combination of Bergen and Hudson Divisions, I get annual sales of approximately 5,540,000 cubic feet per mile of main.

Q. How about Indianapolis, the annual sales?

The Master: Do you need any more of these?

Mr. Ransom: I think one or two.

The Master: I think we have had enough on it.

Mr. Ransom: I think Indianapolis and Philadelphia or Chicago.

Mr. Chambers: I make the same objections.

The Master: I will take Indianapolis and Philadelphia, that is all I will take.

Mr. Chambers: It does not give the size or

35885 anything about it.

The Master: Or you can take Boston and Philadelphia, either two; that is all I will take.

Mr. Ransom: We will take Indianapolis.

A. For the Citizens Gas Company of Indianapolis the sales per mile of main are approximately 4,020,000, according to these figures.

Q. How about Boston?

Mr. Chambers: I move to strike out all the answer.

The Master: Motion denied.

Mr. Chambers: The answer given out of Brown's Directory.

The Master: Motion denied.

35886 Mr. Chambers: I move to strike it out on the ground that it does not show the size of mains or give any of the detailed information. Exception.

A. What company in Boston?

Q. I think probably the Boston Consolidated.

A. The Boston Consolidated Gas Company?

Q. Yes.

Mr. Chambers: Same objection

The Master: Same ruling.

Mr. Chambers: Exception.

A. For the Boston Consolidated Gas Company the annual sales were approximately 7,970,000 cubic feet per mile of main.

Q. Does Brown's Directory give the figure for the Consolidated Gas Company alone, or for the system? What about the Consolidated Gas Company; will you give the figure?

Mr. Chambers: I object to that as being incompetent, irrelevant and immaterial, not the proper way to prove that—taking it out of somebody's directory here when they might prove it properly, if it was competent. 35888

The Master: I am very doubtful whether it is proper, but I will take it.

Mr. Chambers: Exception.

Mr. Ransom: The figures I believe are identical with the figures that are already in evidence; it is merely a matter of computation.

Mr. Chambers: Which makes it all the more improper.

Mr. Ransom: It is proper for comparison.

Mr. Chambers: Will you let us prove some of our case out of somebody's directory, if the Master please?

Mr. Ransom: We do not expect you to use 35889 any evidence so authentic.

A. According to these figures the annual sales of the Consolidated Gas Company of New York were approximately 21,700,000 cubic feet per mile of main.

Mr. Chambers: I move to strike out all the testimony given or taken from Brown's Directory, on the grounds urged when I objected to the admission of the testimony.

The Master: Motion denied.

Mr. Chambers: Exception.

Q. Have you made any study as to whether the mains of the Consolidated Company are more than adequate to take care of such increases in consumption as have occurred from time to time; for example, the recent increase of the send-out of the Consolidated Company alone to practically 100,000,000 cubic feet of gas per day?

A. I have not.

Q. If a strike should break out in the City of New York among employees engaged in steam heating plants, as has been threatened during the past week or two, would you be willing to say that the combined
358 91 capacity of all the mains owned by all the gas companies in the Borough of Manhattan would exceed the main capacity necessary to supply gas to the consumers?

A. No, in my opinion it would be a very, very difficult, almost an impossible proposition, unless you had a great deal of time, to determine the actual capacity of mains required in each street, and I do not know that the mains that are in the street have excessive capacity.

Q. You do not undertake to say that?

A. I do not; never have.

358 92 By the Master:

Q. What is the point of your testimony about the duplication of mains?

A. In my opinion it only illustrates the fact that while a single main on each side of the street, having equivalent capacity, would take care of the proposition, as the company was built up and as the system was built up—it is a main system that is interconnected with the various companies. There were many mains. Here you will find a six-inch main, a sixteen-inch main and a twenty-inch main right on the same side of the street.

Q. The point of your testimony is that it would have been very much better to build larger mains to take care of these things, instead of having them built as they were?

A. Yes, and that is just illustrative of the factor of inadequacy and progress.

By Mr. Ransom:

Q. As a matter of fact, when these mains were laid they should have laid larger mains, is that it?

A. I do not say that.

By the Master:

Q. Well, what do you say? 35894

A. I just say that this illustrates the factor of inadequacy and progress of the art, inasmuch as such conditions do exist. Nobody could foresee what you would require there ultimately.

Q. But what is the point of it so far as I am concerned?

A. Well, that is all that it would show.

Q. Where does that lead me to?

A. Well, it illustrates that there is a factor of inadequacy in respect of mains.

Q. What has that to do with the inadequacy of a rate?

A. It seems to me it has a great deal to do with 35895 it.

Q. What is it; that is what I am trying to get at?

A. It is one of the factors that enters into depreciation.

By Mr. Ransom:

Q. You do not mean to say that these mains on these streets which you have shown here, Fifth Avenue and the like, should be torn up and single mains put in their places of larger size?

A. No, sir, not now. You could not do it.

The Master: I confess I do not know the point of your testimony, Mr. Hine.

Q. Let me ask you one further thing. Before you got up this exhibit, or somebody got up this Defendants' Exhibit AA-304, which characterizes the conditions in these streets as representing duplication of mains, did you examine the records of the complainant company, or did you make any examination in the field to ascertain the number of services and consumers on each of the mains of the Consolidated Gas Company which you have shown, and of the other
35897 companies which you have shown on these diagrams?

A. No, sir, I did not make any field examination and—

Q. Did you make any study of the lateral connections on the various mains of the Consolidated Gas Company shown on your diagram?

A. No, from the information I received I would say that that would be practically impossible.

Q. Practically impossible?

A. Yes, sir.

Q. To show what connections there were and on what streets there were or were not connections?

A. No, there are connections, as I understand it,
35898 shown, and by analyzing those thousands of services you could determine that they were connected to a certain main, possibly. I have seen the condition, though, where meters of different companies were connected to the same services, and how you could check up and tell that it was connected to a certain particular main in that street I am sure I do not know.

Q. Take, for example, your Sheet 1. Does not the same map which you used showing mains on the east side of Third Avenue, 9th Street to 82nd Street, show that out of the 142 blocks of mains belonging to the complainant company on these sheets there are only

eight blocks of mains to which Third Avenue services are not directly connected?

A. Those maps that I had do not show anything about service being connected to any of these mains, none whatsoever.

Q. And you did not make any examination of records to find out?

A. I tried to get the information and had considerable difficulty in even finding out which the transfer mains were. They are not noted on those maps, and it was quite difficult to get that information.

Q. Do you now know that the mains of the New 35900
Amsterdam Company, Standard Company and the Mutual Company shown on your diagram were laid by those companies?

A. I do not.

Q. Laid by them, for the greater part, prior to the time when the ownership of a majority of the stock of those companies passed to the Consolidated Company, and were laid by those companies independently of the Consolidated Company?

A. I did not investigate the time that any particular mains were laid, so I could not answer that question at all.

Q. Didn't you acquire that information at all at 35901
any time in the course of your investigation?

A. No, I was informed that it would be an almost insurmountable job to try to tie up—

Q. Are you not aware that many of the mains of these other companies were laid by gas companies which were at the time operating independent systems?

A. Most certainly.

Q. Didn't you hold the title of chief gas engineer of the Public Service Commission when in 1912, it employed Mr. William A. Baehr, a gas engineer, to

35002 Willard F. Hine, Cross.

report on gas pressures in connection with the transmission of gas through the main systems of the Gas Companies in the City of New York.

A. I do not believe I get all that question.

Q. Didn't you hold the title of chief gas engineer of the Public Service Commission when in 1912 it employed Mr. William A. Baehr, a gas engineer, to report on gas pressures in connection with the transmission of gas through the main systems of the Gas Companies in the City of New York?

A. It is my understanding that Mr. Baehr was hired
35003 in 1910 or early in 1911, and completed his survey of the situation—I know he completed his survey of that situation before I came with the Public Service Commission, and his report I believe was submitted in 1912, his final report.

Q. When did you come to the Commission?

A. In the latter part of May, I believe, 1911.

Q. Do you not know that Mr. Baehr testified before Commissioner Maltbie at a hearing in Case No. 1480, on May 20, 1912, which was reported on page 96 of the stenographer's minutes relative to the services of the Consolidated Gas Company—

Mr. Chambers: I object to him reading the
35004 testimony.

The Master: Objection sustained. You cannot get Mr. Baehr's testimony in that way.

Mr. Ransom: I am not asking him that as a method of getting Mr. Baehr's testimony in; I am asking it as showing his knowledge or lack of knowledge of this expert's judgment.

Q. Do you know what Mr. Baehr testified to before the Commission?

A. I heard him testify and all that he testified in that case, but I am sure I do not remember the details, or what that was. Generally, yes.

Q. Do you recall what Mr. Baehr testified to?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial, improper and not proper cross-examination.

The Master: That objection is overruled.

Mr. O'Brien: I have my objection to it, too. Mr. Baehr is a well known employee of gas companies.

The Master: That objection is overruled.

Mr. Chambers: Exception.

The Master: I will let Judge Ransom bring out what is proper to be brought out in the way 35906
of the witness's knowledge of Mr. Baehr's views and as to how far he agrees with him.

Q. Do you recall what Mr. Baehr reported to the Commission as embodied in his testimony in that case 1480, in which you say you heard the testimony?

A. Generally, yes.

Q. With respect to the service, as indicated by Mr. Baehr's and his assistant's pressure tests, whether it was generally speaking good?

A. Do I understand you correctly as meaning was the pressure as furnished by the company—

Q. That the service as indicated by Mr. Baehr's pressure tests was good. 35907

A. Well, the pressure test would only indicate service as regards pressure, of course.

Q. Yes.

A. Yes, he testified that the service, generally speaking, in Manhattan was good. There were a few special instances where he did not believe that it was good.

The Master: Have you any knowledge of the situation other than that investigation?

The Witness: Yes, a great deal.

Q. Did Mr. Baehr undertake to recommend or did he recommend any changes in the main system as he found it?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial.

Mr. O'Brien: I am going to interpose my objection here, your Honor. We are getting far away from the rules of evidence.

The Master: I will sustain that objection.

Q. During your term as chief gas engineer of the Commission, since 1912, when Mr. Baehr testified be-
35009 fore it, did you ever write a letter to the Consolidated Gas Company in behalf of the Commission, or did the Commission or its secretary, upon your suggestion ever write any letter to the Consolidated Gas Company, making any complaint in respect to the gas pressure maintained by the Consolidated Company in its main system?

Mr. Chambers: I object to that as incompetent, irrelevant, immaterial and not proper cross; embodying more than one question.

The Master: That objection will be overruled.

Mr. Chambers: Exception.

A. I will have to hear the question again.

35010 Q. During your term as chief gas engineer of the Commission, since 1912, when Mr. Baehr testified before it, did you ever write a letter to the Consolidated Gas Company in behalf of the Commission, or did the Commission or its secretary, upon your suggestion, ever write any letter to the Consolidated Gas Company, making any complaint in respect to the gas pressure maintained by the Consolidated Company in its main system?

Mr. O'Brien: I will add my objection to that, your Honor, if I can give some emphasis to Mr. Chambers'.

35911

The Master: Objection overruled.

Mr. O'Brien: This is certainly no way to prove a letter. If the Consolidated Company received a letter I think they ought to bring it in here.

Mr. Ransom: It is negative; there is not any.

The Master: Did the Commission ever write any such letter?

The Witness: In my opinion—

The Master: No, not your opinion, but your recollection.

The Witness: Well, I cannot recollect any definite letter.

35912

Mr. O'Brien: It would be pretty hard to saddle on the consumers the omissions—

Mr. Ransom: Of Mr. Hine?

Mr. O'Brien (continuing): —and commissions of the Public Service Commission of those days.

Mr. Ransom: Mr. Hine—I remember your characterization of him.

Mr. Chambers: I move to strike out what Mr. Hine said about what Mr. Baehr testified in regard to service, on the same grounds as I urged when it was offered. In other words, they have got Mr. Baehr here testifying that the service was good without allowing Mr. Hine to explain.

35913

The Master: But I will allow you to bring out any information you want. I will deny the motion.

Mr. Chambers: But you have Mr. Baehr's testimony and I am deprived of the right to examine him.

The Master: I will deny the motion.

Mr. Chambers: Exception.

Q. Mr. Hine, did you understand that Mr. Chambers' first hypothetical question in the series of hypothetical questions by which you undertook to rule out certain properties as unnecessary—did you understand his first hypothetical question to relate only to the 14th Street and 42nd Street manufacturing plants?

A. The manufacturing plants and the structures on land in the vicinity that has been considered as part of the 14th and 42nd Street manufacturing plants, and the holders connected therewith and the structures on the land.

35915 Q. On the basis of that fact assumed by Mr. Chambers, and stated in his first hypothetical question, did you venture to express an opinion as to the lack of need for Block 985, Lot 7?

The Master: I would like to have a map of those properties; I would like to follow this a little. What do you say the record shows is on that lot, Mr. Ransom?

Mr. Ransom: It has nothing to do with the 14th Street and 42nd Street station; it is the street department.

Q. Mr. Chambers assumed a lot of facts here which, it has been pointed out, were at variance with the
35916 testimony in the case; but what facts assumed by him led you to throw out Lot 7, Block 985, when you also threw out with one fell stroke the two manufacturing plants?

A. The parcel was occupied—

Q. On what facts assumed by Mr. Chambers—

Mr. Chambers: Wait a minute and let him answer the question. Note on the minutes I object to counsel repeating a question when one is pending and the witness is preparing to answer it.

Mr. Ransom: The witness was not answering the question at all.

The Master: We will settle it. Read the question and, Mr. Hine, look at the question and point out what facts led you to throw out that property.

Mr. Chambers: That is what he started to do when counsel interrupted and asked him a question.

Q. Mr. Chambers assumed a lot of facts here which, it has been pointed out, are at variance with the testimony in the case; but what facts assumed by him 35918
led you to throw out Block 985, Lot 7, when you also threw out with one fell stroke the two manufacturing plants?

A. On the testimony of Mr. Alrich as to the occupation of this parcel by various improvements. That is one of the things.

Q. What paragraph or what part of the hypothetical question states the facts which you assumed, that led you to throw that out?

A. Well, now, I cannot answer that with one thing. That is one of the facts. I would have to go through several things to take them all in.

Q. Point them out in the question. 35919

A. That is one of the things. Also that the land owned by the complainant was occupied as testified to by the witness Alrich. That is one.

Q. You are referring to what?

A. The second page of that question.

Mr. Chambers: That is one of the things that he took into consideration?

The Witness: Yes.

Mr. Chambers: Just one of them. You asked for all, so let him give them to you.

35920 Willard F. Hine, Cross.

Q. State the other facts which Mr. Chambers assumed.

A. Well, I took all those facts which he assumed; if you only want them that way, just as they are stated in the question.

Q. Was it your assumption that if the 14th Street plant were not assumed the East 17th Street department headquarters would not be used and would not be needed?

A. It was not. My assumption was that there was sufficient land and would be sufficient land in the
35921 neighborhood of 21st Street to take care of that shop.

Q. To move the street department headquarters and yard up there?

A. Yes, it would not be very serious, I would say.

Mr. O'Brien: Just a little shed and corrugated covering on top.

The Witness: I want to bring out the fact that there also were two holders there. There were two holders on that property, two 250,000 cubic foot holders.

Q. On a part of it?

A. Yes, and a little boiler house.

Q. Yes?

35922 A. And a boiler in it—of a kind. Those are shown by the testimony.

Q. The street department headquarters and street department yard is not a part of the manufacturing plant or operation, is it?

A. No. No, that is not considered.

Q. If you have such a conclusion that the 14th Street plant was not necessary, it would not lead you to throw out this street department headquarters and yard, would it?

A. No, not necessarily.

The Master: In the conduct of this gas business do they need this kind of a yard and headquarters?

The Witness: They have to have several yards of that kind, certainly.

Mr. O'Brien: Your Honor, did you know—

Mr. Ransom: I object to the interruption

Mr. O'Brien: I wanted to ask the Court if he had seen this great open lot there?

The Master: No, I have not been there.

Q. When did you first visit this street department headquarters and observe the conditions there? 35924

A. I do not know when I have been there first. I have no recollection. I know I have been there in prior years, but I have no definite recollection of seeing that before the summer of last year.

Mr. O'Brien: This is where the chickens are running around, in 17th Street.

Q. When did you first visit the 21st Street station and observe the conditions there?

A. Some time in 1911, was the first time I was there, I believe.

Q. You do not know anything about what was going on there before that time?

A. I did not see what was going on there. 35925

Q. Do you know anything about the use made of this 17th Street street department headquarters and yard prior to last summer?

A. Yes, I would say that I did. I have not seen it; I don't remember definitely having seen it. I have been there before.

Q. And you recognize that that street department had to have a headquarters and office and a yard for storage and the assembly of mains and materials?

A. They have to have storage facilities and yard space.

Q. And your assumption that that was not needed, even though used, was based simply on a theory that it could have been transferred to 21st Street?

A. That is my opinion, yes—or to some other place. You do not need to have it in a definite place.

Mr. Ransom: I move to strike out from this answer to the hypothetical question and exclude from the scope of it this Block 985, Lot 7.

The Master: No, I will pass on that entire situation when I decide this case.

Mr. Ransom: On the ground that he has not
35927 any knowledge during a considerable part of this period at all.

Mr. Chambers: He took Mr. Mrich's testimony for that.

Mr. Ransom: He certainly did not. Mr. Mrich showed the need for that property definitely.

The Master: I will dispose of that question when I decide this case.

Q. As to Lots 19 and 20 of Block 985, when did you first visit these lots?

A. That would be the same as the rest of it. They are all together.

Q. You have not any idea or personal knowledge
35928 of what was going on there down to last summer?

A. No, I cannot remember definitely.

Q. When you went there for the purposes of this case?

A. Yes, the first definite idea from personal observation.

Q. You do not know what went on down there from 1913, or after 1913?

A. Not from personal observation.

Q. But you are clear that the company did not need it?

A. I do not think that they needed that property.

The Master: During any of these years?

The Witness: During any of those years, yes.

Q. Do you think that when the officers of this company in 1913, ousted the Curtiss-Blaisdell Company from the property and terminated the lease to that company, gave up the rentals that they were receiving and resumed the active use of the property for street department purposes, they did an unwise and unnecessary thing?

A. Well, now, I don't know.

Mr. O'Brien: Just a minute. I am going to 35930
object to that part of the testimony that rings in the Curtiss-Blaisdell Company.

The Master: Objection overruled.

Mr. O'Brien: Exception.

The Witness: I am sure I do not know what they had in mind when they did it.

The Master: No, the question is, do you think that it was unwise?

The Witness: Well, I don't know. That would depend on many other factors, possibly. There may have been many factors as to why they would have thrown them out.

Q. Are you willing to say that when the officers of 35931
this company terminated a lease, put out a tenant, gave up rentals which otherwise would have come to the company and resumed the active use of the property themselves, they were doing an unwise and unnecessary thing, that they did not need the property then and have not needed it since?

A. As far as the actual gas business of this complainant company is concerned, yes, that is my opinion.

Q. The street department headquarters and yard is part of that business, is it not?

A. The other part is involved. They may be doing something other than a gas business at another place and they may as a company want to use this, and be perfectly justified. I am speaking of gas purposes only.

Q. That would not be a reason for throwing out this company, would it?

A. What?

Q. The fact that they may have been doing something some other place—the fact that they were using it for those purposes?

35933 A. Yes, it would not make any difference so long as the other property was available and could have been used; and there was available property in that neighborhood sufficient for that.

Q. You did not see it?

A. When?

Q. Any time before last summer.

A. Yes.

Q. When?

A. I said I had been over at 21st Street in 1911.

Q. Where was the available property?

A. Well, there was some property available down where the horse hospital was located and the property

35934 the Government toluol plant is now erected on, that was available for other uses. There is a large coal storage yard there, that they have crowded the tennis court into, that you might have crowded something into. There is property there that could have been used.

Q. You could make a street department headquarters and yard there?

A. Yes, I should say so.

Q. We will come to that in a minute. You are willing, are you, now, having visited this property last summer and having for the first time observed

conditions there, to pit your judgment against that of the officers of this company on the question of whether they should have terminated this lease and resumed the use of this property?

A. I have not done that. I have stated very definitely that from the points enumerated in this question, from the testimony of how the various properties were occupied, by Mr. Ahrich, from the various other factors there enumerated, that it was not necessary for the gas purposes of this company to have this property there.

By the Master: 35936

Q. Let me ask you, Mr. Hine, do I understand that all of this Lot 7 and Lots 19 and 20 are not used for this street department?

A. That is true.

Q. Some of it is used for the holders?

A. Roughly or approximately one-half of that Lot 7 is occupied by two holders and a little boiler house, and so forth, that are not in use now.

Mr. Ransom: They have been written off.

The Witness: In 1919.

Mr. Ransom: Yes, or 1918?

Q. What I am trying to get at is this: You say this street department does require some storage yard and 35937 space?

A. Yes.

Q. Over 21st Street. How much space did you allow?

A. Well, nothing especially definite, except that I would say there would be plenty of space on—

Q. I have got to know how much space you figure on?

A. Take Block 987, Lot 37, there is space in there.

Q. About how many square feet would you say were needed?

A. I have not taken it in any definite factor. There is space available there (indicating diagram).

Q. You have got to figure on some quantity of square foot area, have you not?

A. Well, if you were actually moving it over, then you would have to take up that detail.

Q. We are moving it over in theory—aren't you, in your testimony?

A. Well, you can get sufficient space there on Lot 37.

Mr. Ransom: What do you mean by "there"?

35939 The Witness: Block 987, Lot 37.

Mr. Chambers: Block 987.

Mr. Ransom: That is property used for coal storage, according to the testimony.

Q. Is that correct?

A. I do not remember that special factor. I believe it has been at times.

Q. And where else would you have it?

A. That would be sufficient there. There is coal storage in one corner of this and a big building on this side of the property (indicating), and some minor improvements, and the toluol plant of the Government.

Q. If that Block 987 was temporarily used for

35940 other purposes, where would you put this street department?

A. If that was necessarily used for other purposes and they could not have gotten along without that, then you could not have used any of these. If it is all absolutely used and necessary to be used to its full capacity. There is some space in some of these buildings that you could crowd out. The fact is you can crowd more in on this valuable land. There is a tennis court on Block 952.

By Mr. Ransom:

Q. What you mean by tennis court is that during recent times when there was an impossibility of getting all the coal the company needed, some of the employees of the company have put that court in some space that you said could be used for coal storage and would be used?

A. I have not said any such thing.

Q. We will come to that.

Mr. O'Brien: I am going to object to that long piece of testimony on the part of Judge Ransom, unsworn.

Q. You never had charge of a street department, 35942
did you?

A. No.

Q. You never had the responsibility for the results in a street department?

A. No.

Q. You never had to judge where a street department should be located, have you?

A. Yes.

Q. Where?

A. In St. Louis and here—general experience.

By the Master:

Q. Assuming now, that part of this Block 985, Lot 7 and Lots 19 and 20, was used for the street 35943
department that you say could have been moved elsewhere, the balance of it you say was used for holders in conjunction with 14th Street?

A. Yes, there were two holders on this property—two 250,000 cubic foot holders.

Q. So the balance of that block I must consider when I consider the 14th Street plant?

A. Yes, the balance of that is the 14th Street plant, and then part of it was the street department.

Mr. O'Brien: It is as flat as a pancake, the property with those holders.

Q. What I am trying to get at, Mr. Hine, is that about half of this Block 985, with Lots 7, 19 and 20, is this street department, which you say could be used elsewhere?

A. I think so, yes.

Q. The other part of it you say was part of the 14th Street plant, and if I reach a conclusion that the 14th Street plant was not needed, then this other half was not needed?

A. Well, you cannot really say it was part of it. There are holders right there near the 14th Street
35945 plant, but they are separated, about a block or two away.

Q. That is what I am trying to get at. Is it necessarily tied up with the conclusion I reach about the 14th Street plant?

A. No, not necessarily.

Q. What is your testimony, that irrespective of the 14th Street plant those holders were not necessary?

A. Yes.

Q. Were not in any event necessary?

A. Yes.

Q. Whether I have the 14th Street plant necessary or otherwise?

35946 A. Yes.

Q. If the 14th Street plant in my judgment was a necessary thing, you would say this Block 985 was not necessary anyhow?

A. Yes.

Q. What do you do about that holder capacity?

A. I think there was other sufficient holder capacity.

Q. Where?

A. In the system, in the company's holders.

Q. They could have gotten along without it?

A. Oh, yes, without that half million.

Mr. Chambers: It just shows they could, because they have abandoned them.

The Master: There are many other things might enter into that question.

By Mr. Ransom:

Q. With respect to the resumption of use in 1913, of this Block 985, you recall, Mr. Hine, that in 1913, the Public Service Commission and the City entered into contracts for the building of more than a quarter of a billion dollars worth of new subways, do you not?

The Master: What has that got to do with 35948
this?

Mr. Ransom: We will come to that in a minute.

Mr. Chambers: I object to that.

Q. The contracts were made in March of 1913, do you remember?

A. I do not remember when those were made.

Q. Or about that time.

A. Well, sometime. There were contracts made; I do not remember how much they were for—do not remember those things.

The Master: Well, they were large contracts?

The Witness: Yes, sir, very large contracts 35949
for subways.

Q. Contracts were made for the tearing up of the street and many different conditions had to be dealt with from 1913, on?

A. Yes.

Q. Do you know that in connection with those conditions the company, when it terminated this lease and resumed the use of this property, put up an electric derrick there to handle mains and materials on this property in connection with these new subway conditions?

A. Well, I do not remember when that was. I know that they put one up there.

Q. In connection with these increased demands on the street department?

A. I do not know about that, no.

Q. And yet in spite of those conditions you would say that the company was wrong in getting hold of that property so they could use it in meeting these new demands?

A. No, I said—

35951 Mr. O'Brien: Just a minute, Mr. Hine. I object to that. He says, "Yet in spite of these conditions"—referring to a lot of hypothetical matter he is putting in his questions, your Honor.

The Master: Objection overruled.

Mr. O'Brien: Exception. The point is that Mr. Ransom in his question is embodying now the hypotheses of his previous three questions—"and yet in spite of these conditions." I object to it.

The Master: Yes. The witness is able to take care of himself. Objection overruled.

The Witness: No, I have just stated it was my opinion it was not needed and was not necessary

35952 for the gas purposes of this company at that time.

Q. Reference has been made to these two holders on a part of Lot 7. Are you willing to say that it was not a useful thing to have these holders there in connection with the governor house as a means of aiding in the maintaining of pressure on the district?

A. Oh, I don't doubt that if they were there that they aided, yes—if they were used.

Q. That is, the use of holders is not merely storage capacity, is it—holders also have a relation to the maintenance of pressure?

A. They very usually feed the particular district in their neighborhood.

Q. With respect to pressure?

A. Yes.

Q. That is, holders serve in a double capacity, where you have a requirement like you have under the New York Statute—

A. What requirement is that, may I inquire?

The Master: Pressure requirement.

The Witness: That inch and a half pressure requirement?

Q. Yes, for storage capacity.

Mr. O'Brien: Just a minute. You asked him about the statute; now let him answer it. 35954

A. As far as the statute is concerned, I do not believe from the information I have received that it was ever lived up to. I do not see how it could have been, either.

By the Master:

Q. You do not see how it could be?

A. I don't see how it could have been.

Q. So you have not very much respect for the statutory regulation, have you?

A. Well, that is the pressure requirement only.

Mr. O'Brien: The courts passed on that, your Honor.

The Master: I know the courts passed on these things, but I am interested in getting testimony from a man like Mr. Hine, condemning this legislation. It just illustrates some of the stupid things the legislature does. 35955

By Mr. Ransom:

Q. The holders have a relation, have they, to the storage of gas and the maintenance of pressure on the adjacent district; isn't that true?

A. Yes.

Mr. Chambers: Did you say they have not lived up to the pressure requirement?

The Witness: Of the statute. I do not believe so.

The Master: He said nobody could; he did not see how anybody could.

The Witness: I think the record will show that they did not.

The Master: As I understand your testimony, you do not see how anybody could?

The Witness: I do not see how they could, no—that is not within any reason.

Q. What do you think ought to be the relation be-
35057 tween the holder capacity, the storage-holder capacity of a company, and its maximum day's sendout?

A. Well, I have testified as to that, that I thought they would require in the neighborhood of five per cent over that.

Q. I am not speaking of manufacturing capacity, I am speaking of storage-holder capacity.

The Master: With relation to the maximum daily sendout.

A. That depends a good deal on how your maximum days come in and whether you just get an occasional maximum day, without a steady load, coming on that way.

35058 Q. Well, suppose that you had three or four or five days in succession of steady load, as you have in New York City, then what would you say?

A. Generally speaking I would say the holder capacity would want to be around 75 per cent at least of the storage capacity, and beyond that point you would be unsafe. I mean 75 per cent of the maximum day's sendout.

Q. That is, you think it is safe operation, where you have got a system that is making both coal and water gas, to have 75 per cent—have storage capacity equal to 75 per cent of your maximum day's sendout?

A. I would say that anything below that was unsafe.

Q. What would you call a reasonable relationship between maximum day's sendout and storage capacity?

A. I would say between 80 and 90.

Q. You would not agree with Mr. Little's storage capacity of 1 3-4 times the maximum day's sendout?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial.

The Master: Objection overruled. I think it is proper cross.

A. I do not believe that so much would be required 35960
in a large system, with so many manufacturing stations and separated manufacturing stations. In a small company the situation is quite different; and also the situation is different because of the fact that you have got to build commercial sized holders.

The Master: Let me ask you in that connection, Mr. Hine—

Mr. O'Brien: Just a minute. Will you permit me to make a motion here?

The Master: Yes.

Mr. O'Brien: I move to strike out the question and answer on the ground that Mr. Little gave no such testimony in this case.

The Master: Motion denied. 35961

Mr. O'Brien: Does your Honor assume that that testimony is in this case?

The Master: No. I do not recall the testimony at all. I am taking Mr. Hine's testimony that if Mr. Little gave that testimony he does not agree with it.

Mr. Chambers: No, he did not say a word about Mr. Little's testimony.

The Master: As to New York.

Mr. Chambers: He did not say that he agreed with it.

Mr. O'Brien: Mr. Little gave no such testimony in this case.

The Master: We will see what he said. Read the answer.

(The answer was read by the stenographer.)

The Master: That is what I said, if Mr. Little made any such statement Mr. Hine does not agree with him so far as New York is concerned. Isn't that so, Mr. Hine?

Mr. O'Brien: Mr. Little gave no such testimony.

35963 By the Master:

Q. Whether Mr. Little did or did not make that statement you do not agree with that figure; is that correct?

A. Yes, sir.

Q. In a large city like New York?

A. Yes.

Q. With separated plants?

A. Yes.

Q. Is there any advantage in your judgment in having separated plants?

A. That all depends. I do not believe that you would need to have separate plants, in having them
35964 geographically far apart. They have got to be built up in units that are practically isolated, although they may be on the same property.

Q. Isolated from each other?

A. Isolated from each other, so that if a building were to fall down it would not destroy everything in the place.

Q. That is what I am trying to get at. I got the impression from what you said that you did believe in a segregation of plants from each other at distance apart?

A. Well, not an especial distance. I was thinking of a plant in this way: In the ordinary plant all your

water gas machines would be in one building. If you put this whole thing in one building, that would be one plant, I would say. If you built one building, and over half a block away, 300 or 400 feet away, you built another plant, I would say those were isolated plants and each one was independent of the other one to a very considerable extent.

Q. The further away they are the safer is the situation, is it not?

A. Yes.

Q. And the less storage capacity you say you would need? 35966

A. No, I don't believe the separation of the plants would have much to do with that.

Q. I thought that is what you just said, because of widely separated plants you would need less storage capacity

A. No, I was thinking that because you are not tied up in one bucket, so that if one of the valve houses went down your whole manufacturing capacity or output would not be shut off.

Q. Separated plants require less storage capacity, that is your point?

A. Yes.

Q. Whether they are separated to a greater or less extent does not make so much difference, so long as they are separated? 35967

A. Yes. If you have two or three plants you do not need the same capacity as you would with a plant of one unit.

By Mr. Ransom:

Q. In your studies in Minnesota last year did you learn the relation of gas holder capacity to maximum day's sendout in Minneapolis?

A. Yes, I did.

Q. Do you recall what it was?

35068 Willard F. Hine, Cross.

A. No, I do not. I saw the figure there a short while ago, but I do not recall it.

Q. Practically identical, were they not? A. I believe that the maximum day's sendout was more than the storage capacity.

Q. Gas holder capacity, 9,000,000 cubic feet, maximum day's sendout 9,852,000 cubic feet?

A. Yes.

The Master: Where is that?

Mr. Ransom: Minneapolis.

The Witness: From Brown's Directory.

35069 By the Master:

Q. Is it several plants or one plant?

A. They have a water gas plant and a coal gas plant right together.

Q. Not in one building?

A. Not in one building, no, but right close up.

Q. As close up as the Astoria plants are?

A. They are pretty nearly as close as adjoining buildings usually are. The building are pretty nearly adjoining.

Q. The Astoria plants are, are they not?

A. Well, the Minneapolis is practically one structure; that is, the rooms go through the separate build-

35070 ing.

By Mr. Ransom:

Q. Are you familiar with the figures, for example, of Providence, Rhode Island?

A. I am not.

The Master: You are reading now from Brown's Directory?

Mr. Ransom: Yes.

Q. 13,000,000 cubic feet storage capacity and 8,500,000 cubic feet maximum day's sendout.

A. I am not familiar with them.

By the Master:

Q. Your statement as to the statistics in Brown's Directory applies to these statistics; is that right?

A. Yes.

Q. You assume them to be correct?

A. I assume them to be correct.

Q. Do you know whether that is one plant or several separated plants in Providence?

A. No, I do not know about Providence, and that is getting down, in those cities, to the smallest situation in building commercial units. Where you build one holder of two to five million capacity, why, you jump 35972
away over the lot.

By Mr. Ransom:

Q. Providence is a city where they have both coal and water gas?

A. I believe so.

Q. The Citizens Gas Company of Indianapolis, gas holder capacity seven and one-half million cubic feet, maximum day's sendout 9,543,000 cubic feet?

The Master: That is pretty close to what Mr. Hine said: he said 80 to 90 per cent. What storage capacity has this company, do you know, Mr. Hine, offhand?

The Witness: No, I do not know offhand. 35973

The Master: Look it up, will you.

The Witness: Of the Consolidated Company alone?

The Master: No, of the system.

The Witness: In 1918, 120,000,000 cubic feet, according to Exhibit AA-124.

Q. That includes relief holders?

A. Consolidated alone 49,660,000.

The Master: Would it include these holders on Block 985?

The Witness: Those figures do include that half million, yes.

The Master: 40,000,000 to 50,000,000?

The Witness: Yes. They include some others.

The Master: And 120,000,000 cubic feet for all of the system?

The Witness: 120,000,000 for all of the system, interconnecting.

The Master: And it is your testimony that they did not need these two holders?

The Witness: Well, the record shows that they

35075 were not used then.

The Master: But you say you did not need them?

The Witness: I do not think—they could not have needed them when they did not use them at all in 1918.

Q. Are you familiar with the Boston condition of the gas holder capacity 20,199,000 cubic feet, maximum day's sendout 24,352,000 cubic feet?

A. No.

Q. In fact, you have not made any study of these different cities to show the usual and customary relationship between holder capacity where large quanti-

35076 ties of coal gas are made, and the maximum day's sendout?

A. Large quantities of coal gas?

Q. Yes.

A. The differential there—

Q. Well, any of these cities?

A. Yes, I have made studies.

Q. It is good operation and necessary and wise to have large holder capacity where you are making part coal gas, isn't it?

A. Well, that would depend upon what part. If you made exclusively coal gas, I think you would need more.

35977

The Master: Why is that?

The Witness: Because it is uneconomical to vary the production of the coal gas unit, you want to keep it going along with everything that is heated by producing gas. With a water gas plant, you can shut down for an hour if necessary.

Q. What cities did you make any study of that for?

A. I have made studies of the statistics as shown in Brown, and shown in various reports covering a great many cities in the United States at various times.

Q. Well, name some of them?

A. Well, practically all of the cities that you will find in Brown's Directory, I have gone over those.

35978

Q. Can you give the figures which sustain your surprising statement that—

Mr. Chambers: I object to the characterization.

Q. Or your statement that so low a relationship is advisable?

Mr. Chambers: I object to the characterization in the question.

The Master: He struck out the characterization.

A. I did not make a statement that such a low figure was advisable. I gave what I think was the minimum below which you should not go, and that it should not be so very much above that, considering the conditions here. Now, there is no other city in the United States where you have got the conditions you have got in New York.

35979

Mr. O'Brien: Why didn't you ask him about Chicago, Judge?

The Master: Mr. O'Brien, I have got to insist that that stop. It is improper.

Q. In Laclede they haven't any such relationship have they?

A. I don't know what their relationship is now.

35080 Willard F. Hine, Cross.

Q. Brown's Directory figures gas holder capacity 20,000,000 cubic feet, maximum day's sendout 23,887,000?

A. Yes.

Q. Can you name any cities where your studies confirm any such figure as you give?

A. Not now, no. I have seen those figures; I have seen companies sending out a maximum day of twice what their holder capacity was.

Q. And they were pretty nervous, and in a pretty bad shape about it, weren't they?

35081 A. Why, they needed larger holders.

Q. Will you name any city where that is done?

A. I don't know right now.

Q. Any large cities where that has taken place?

Mr. O'Brien: You have just read it off, haven't you?

The Master: Now, you are doing that again.

Q. Name any large city where you can say that has ever taken place?

A. I cannot remember them. I cannot recall them now; I do not remember the details of them.

Q. Your answer to hypothetical question No. 1 also specifically excludes as unnecessary Block 989, Lot 26, and Block 991, Lots 26 and 50, the last being in

35082 bulkhead?

A. Is 26 the bulkhead, did you say?

Q. 50, I think.

A. 26 and 50, Block 991.

Q. Yes, Lots 26 and 50. Those were properties which were taken away from the Consolidated by the City of New York under condemnation proceedings in 1907, weren't they?

A. I so understand.

Q. You never saw any of those properties while they were owned and used by the Consolidated?

A. I did not.

Q. The City had built on a part of them long before you saw them?

A. I think so; I don't know.

Q. And you know nothing of their condition while in use by the Consolidated prior to 1907, or their use by the Consolidated?

A. Yes, I do; it was testified to by Mr. Alrich.

Q. You know nothing of them of your own knowledge?

A. Not from seeing it, no.

Q. Or their condition and use down to 1912? 35084

A. No. That applies to the period at the time they were sold.

Q. In connection with your opinion, if it can be called such, ruling out these properties, did you know that even after the City took away these lots and bulkhead by condemnation in 1907, the Consolidated Company rented from the City all that the company could of the space and paid rent to the City for the use down to the end of 1911, or early in 1912?

A. No.

Q. What leads you to say that the officers of this company did an unwise and unnecessary thing to pay rent to the City for property that they did not need at all? 35085

A. Well, I do not think that they needed that entire plant. I do not think they used good judgment to keep that plant going, just so far as the gas operations of this company are concerned, and that includes those parcels.

Q. Well, you don't know what was done on this land and bulkhead from 1907 to 1912, do you?

A. Well, Mr. Alrich testified to that.

35086 Willard F. Hine, Cross.

Q. And you assume the correctness of his testimony?

A. I did, yes.

Q. You do not doubt that the properties were used in the manner described by Mr. Alrich?

A. No, I do not doubt they were used. I know that some of this was used.

Q. You have been told, haven't you, Mr. Hine, that the maximum day's make of a gas plant or system of plants does not necessarily occur on the same day as the maximum day's send-out or requirements?

35087 A. Why, I know it, and I believe I have probably been told it, and I have heard it.

Q. That is, the maximum day's make cannot be prearranged to coincide with the day of the maximum send-out?

A. Sometimes not.

Q. The maximum make is the result of a favorable combination of many circumstances?

Mr. O'Brien: I object to the testimony of the witness.

The Master: Objection overruled.

Mr. Ransom: You are renewing your objection to his qualifications?

35088 Mr. O'Brien: I am objecting to Judge Ransom's testifying.

The Master: You fall into the same habit, Judge Ransom, of getting into a discussion with counsel.

Mr. O'Brien: I think I have a right, without Judge Ransom interfering, to make my objection and state the reason for it, and the whole form of the examination is error.

The Master: You made your objection, and I made the ruling, and then I criticised Judge Ransom for going into a discussion with you.

Mr. Ransom: I have learned more bad habits in this case than in all the rest of my life.

Mr. Neumann: You had them before you came in.

The Master: There comes the Public Service Commission.

Q. Take Question No. 2, Mr. Hine, you venture to say that Block 952, that Lots 29 and 30 were not needed?

A. Yes.

Q. When did you first visit Lot No. 30?

A. In 1911, I would say both those lots. 35990

The Master: Tell me, Mr. Hine, so that I will know what I am talking about. What are they used for by the company.

The Witness: Lot No. 30 has a 4-story building erected thereon, brick storage building, so-called; Lot 29 is vacant, used for storage purposes according to the testimony of Alrich.

Q. When did you first go into the building?

A. I believe the first time I entered that building was last summer.

Q. You don't know what went on there before that?

A. Except as shown by the testimony.

Q. You were not in there during the time it was 35991
used as a machine shop? A. No.

Q. During the time the building on Lot 30 was used for a machine shop, you can't say it was not needed by the company, can you?

Mr. O'Brien: Is that in the testimony, Judge? I am objecting to your reading a lot of things into this testimony that is not here.

Mr. Ransom: It is in the testimony at page—

Mr. O'Brien (interrupting): I do not think, your Honor, that Mr. Alrich was really put on to testify in anything except a most general and cursory way about the uses of the property.

35002 Willard E. Hine, Cross.

Mr. Ransom: It is on page 845. As a matter of fact, of course most of this matter was brought out by Mr. O'Brien on cross-examination, the second time Mr. Alrich was on the stand.

The Master: Objection will be overruled.

Mr. O'Brien: Exception.

The Master: The question will be amended to read as follows:

Q. During the time the building on Lot 30 was used for a machine shop, as testified to by Mr. Al-
35003 rich, you can't say it was not needed by the company, can you?

A. In my opinion it was not necessary, needed or used for the purposes of this company, with the equipment that is there at that station.

The Master: Even as a machine shop?

The Witness: Even as a machine shop. There are other machine shops there.

Q. You haven't made any study of the machine shop facilities at that station or other stations at that time, have you?

A. No.

Q. Have you ever had charge of the sale and supply
35004 of gas ranges and appliances in a large city?

A. No.

Q. Have you ever been charged with responsibility for buying ranges and appliances cheaply and advantageously, and accumulating in the summer a supply adequate for the heavy winter demand?

A. No, sir.

Q. How can you say that the officers of this company acted unwisely in providing machine shop facilities elsewhere and discontinuing the use of this building as a machine shop, and using it for the storage of appliances and other material?

A. Why, I don't. I say this, that I do not believe that they needed that structure, with the facilities that were available there at the shops, that were there on this property, with this property as it was used according to the testimony. I do not think that it was necessary to use that building, or reasonably necessary, and that it was therefore not used for the purposes of the consumer.

Q. Where would you have had the storage facilities provided?

A. Well, these storage facilities as provided in 1918 could have been put anywhere, because there was 35996
nothing in it then; but as to the other times, I don't know how much storage there was in it.

Q. You were there in the summer of 1918, early summer?

A. Yes. When they were accumulating the stock surplus, I suppose, and there was nothing in it.

Q. Did you know that the company was even having to rent storage space in addition to this building?

Mr. Chambers: When this was vacant, do you mean?

Mr. Ransom: It has not been vacant.

The Witness: It was vacant in 1918. 35997

Q. Entirely vacant during the year 1918, or merely at the time you were there?

A. It was vacant two different times at least.

Q. When were they?

A. In the summer of 1918, except for a watchman and a few packages on the first floor; there was nothing at all on the second floor or the third floor or the fourth floor, and maybe five or six cases on the whole lower floor there.

Q. When was that?

A. That was in August, I believe, 1918; some time along there.

Q. Didn't you find over ten thousand dollars' worth of automobile tires at that time there?

A. I did not find any tires.

Q. Did you go to see whether there were?

A. I went there and I saw that there were a few cases on the first floor. I do not know how many dollars' worth of automobile tires there were, or what there were

Q. You found automobile tires there, did you?

35009 A. I do not remember seeing a tire there.

Q. Or cases of tires?

A. They may have been cases of tires. I do not know. I did not investigate the contents of the boxes.

Q. Did you notice the tire rack there on the southwest corner?

The Master: Of the ground floor?

The Witness: No, I did not notice that. It was practically not used. A few things around there, that is all it was; I did not pay much attention what they were. The other floors were vacant; there was a workman's bench on the second or third floor, with a piece of pipe on it, and a tool,

36000 and a few fire buckets in various places, and that is all there was in that whole building.

Q. On the basis of what experience do you think you are able to say that the company did not need this storage space when as a matter of fact it was not only using that, but renting additional space during the winter?

Mr. O'Brien: I object to that, the Judge knows that form is not correct.

The Master: Objection sustained, no proof here that they were renting other space.

Mr. Ransom: There is proof that they were renting space, and that not only was this being used, but they were renting other space.

The Master: Where is the testimony that they were renting space elsewhere?

Mr. Ransom: It was testified to during—

The Master: Well, I do not recall it, and I will sustain the objection.

Q. Well, assuming that this property, after the demands for storage space for appliances, was used as described by Mr. Mrich, and that an additional space was rented by the company's officers to meet the demands for storage space, would you say still that the company's officers were wrong in regarding this property as necessary for that purpose? 36002

Mr. O'Brien: I object to that hypothetical question.

The Master: I will allow it. I do not see where it gets us.

The Witness: I would like more information than that, sir, to answer any such question.

The Master: But the witness says this building was vacant and was not necessary, and they were renting space elsewhere, and were making a useless expenditure somewhere else, according to this witness. 36003

Mr. Ransom: He hasn't any responsibility with respect to that.

The Master: I understand all that, but you get nowhere with that kind of examination.

Mr. Chambers: I would be glad to have the Master ask any questions on this phase of the case, because it is important.

Mr. Ransom: It is of no possible importance.

Mr. Chambers: I invite the Master.

Mr. Ransom: And it is a waste of time, and the most outrageous thing in the case.

The Master: The Master is not waiting for any invitation; he will ask questions when they occur to him.

Mr. Chambers: It is important.

Q. Do you remember an inquiry conducted by the Public Service Commission, in the spring of 1918, as to the available coal storage space of the Consolidated and other gas companies?

A. I remember that investigation.

36005 Q. Do you remember the opinion of the Commission, and the Commission's recommendations, as to the coal storage space of the Consolidated Company at that time?

A. I do not remember the details of that recommendation.

Q. Do you remember there was an opinion, and there was a recommendation?

A. There was a recommendation, although I do not remember it now, just what it was.

Q. And the Commission and the company at that time made surveys of the available coal storage space, did they not?

36006 Mr. Chambers: I object to that as irrelevant, incompetent and immaterial.

Mr. O'Brien: I am going to object to this because that took place at the time that both these gentlemen, the witness and the interrogator, were connected with the Public Service Commission.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Mr. Ransom: Read the question.

(The question was read by the reporter.)

Mr. O'Brien: Your Honor, there is the same objectionable form of questioning, assuming a lot of facts not proven.

The Master: Objection overruled.

A. As I understand it, they made an investigation as to the amount of coal they had stored to be available.

Q. And what storage facilities and space for both coal and oil, did they not?

A. Well, as to coal, I do not remember whether that came up; as to oil, I know that the factor of storage available did come in. 36008

Mr. O'Brien: As a matter of fact, only on the question on the storage of coal, and your Honor can see the objection to these questions.

The Master: Mr. Hine says he does not recall coal, but recalls oil, and you say it was only coal.

Mr. O'Brien: Well, I am so advised by the attorney for the Public Service Commission.

The Master: Well, he is not testifying.

Mr. O'Brien: The present attorney.

The Master: Well, he is not testifying, and Mr. Hine is testifying, and we will take Mr. Hine's recollection.

Q. Don't you recall the question of coal and oil storage space had been gone into? 36009

A. There were questions asked about that.

Q. And computations and surveys were made?

A. Just one minute. I do not remember that in connection with this company they went into the subject of the amount of available storage space. I only remember them investigating the amount of coal they had. The oil storage facilities, yes, they did go into as to the quantity of storage they had available.

Q. Didn't you make recommendations to the Commission on the subject of the amount of coal supply

that this company should carry, and other companies should carry?

A. I do not remember whether I made any recommendations or not.

Mr. Chambers: As of what time?

Mr. Ransom: As of that time.

The Master: 1918.

Q. Don't you remember making a recommendation that the company—

Mr. O'Brien: I don't think that is improper, for Judge Ransom to go into these matters.

36011 Q. (Continuing.) Should carry at least two months' oil supply, and two months' coal supply?

Mr. O'Brien: That is objected to in this form and objected to on the ground that they are now going into a period in the office of the defendant the Public Service Commission when the interrogating counsel for the complainant was counsel for the Public Service Commission, and when the witness, Mr. Hine, was then on the staff of the Public Service Commission.

The Master: That don't make any difference.

Mr. O'Brien: I think it does, your Honor, on this delicate situation.

36012 The Master: It is not delicate at all. Mr. Hine is testifying now to the necessity of having certain land and vacant property here, and storage space for coal, and counsel has a right to bring out what this witness has said at other times and under other circumstances with reference to what the coal storage ought to be.

Mr. O'Brien: But, your Honor, the interrogating counsel for the complainant is, and has, in all of this line of questioning where he has delved into the doings of the Public Service Commission at the time he was counsel, is using the in-

formation, he is using the confidences that grow out of that relationship.

Mr. Ransom: It is all in a big opinion of about 75 or 100 pages.

Mr. O'Brien: But you are taking advantage of your position of attorney and client, and I call it to the Master's attention, and with that I have done my duty as counsel for the defendant Edward Swann, and as a member of the bar.

The Master: Objection overruled.

Mr. O'Brien: Exception.

The Master: Did you recommend two months' 36014
storage of coal?

The Witness: I remember that I did make recommendations, I do not now remember the extent, or whether they apply to all the companies, or just what it was.

The Master: Well, what is your judgment now?

The Witness: Well, that they—

The Master (interrupting): Should they have a considerable coal storage?

The Witness: They most certainly should.

The Master: Two months?

The Witness: Two months, I should say they 36015
ought to keep that ahead, as far as they can, but they won't.

Q. Well, didn't you at that time advise that the Consolidated Company, in your opinion, did not have sufficient space available for the storage of coal, that it should carry?

A. I am certain I did not do that.

Q. Did not the Commission at that time make a recommendation of the increase in the coal storage space?

A. I do not remember that they did, to the Consolidated, no, or with any company, in fact.

Q. With respect to Lot 29, Mr. Ahrich testified as to the use of this lot for coal storage before the last few years, when it has not been possible to get the coal in quantities contracted for. Do you think now it was not and is not good policy to have this lot available for the storage of coal and other material for 21st Street and other purposes?

A. No, in my opinion a corner lot 25 feet wide adjoining a building with an avenue on one side certainly would not be of much value for coal storage.

Q. But you do not doubt that it was so used?

36017 A. I do not doubt that it was used, no, it was. I don't know why it could not be used for storage of miscellaneous stuff.

Q. Coal?

A. I do not believe it was ever used very much for coal; it may have been.

Q. The opinion adopted by the Commission in that case to which you have been referring—

Mr. O'Brien: Judge, will you refer to the particular proceeding there? Haven't you got two proceedings mixed up?

Q. Did you or did you not coincide with the opinion of the Commission, the opinion of Commissioner

36018 Kracke for the Commission, as to the increase of coal and oil storage?

A. Well, now, I do not remember the details of that I could not say whether I did or not. That involved the various companies, and just what it is now I do not recall.

Q. The Commission discussed company by company what each company probably had, and what it ought to have?

A. Yes.

Q. And then it made recommendations?

A. They did.

Q. And you went over those recommendations?

A. I did.

Q. And made some of your own in writing?

A. I do not remember. I do not believe I went over those recommendations before they were adopted. I do not believe they were submitted to me before they were adopted.

Q. You made your own recommendations in writing?

A. I think I made some recommendations, before the opinion was adopted.

The Master: Do you recall now whether those 36020
recommendations were in accord with your judgment?

The Witness: There was certainly nothing serious.

The Master: Substantially in accordance with your judgment?

The Witness: Yes, substantially, but they went a great deal further than my recommendations did, I know that.

Q. You mean they recommended more coal storage?

A. I do not remember the details. They went into the question deeper than I did in my recommendations. 36021

Q. That is on the coal storage?

A. I do not remember the particular details of coal storage.

Q. The oil storage space?

A. The oil storage space, I do not remember that.

Q. Well, you think this company ought to have, in view of what has taken place since 1918, space for the storage of at least two months' supply of coal?

The Master: He has already said that.

Q. Have you made any computations which enable you to say that this company could store that quantity of coal without using these coal storage lots which you say were not necessary?

A. That Lot 29?

Q. Yes, and the others?

A. They would not be a drop in the bucket.

Q. How much coal could you store on that lot?

A. Well, you could store a lot of coal, but in comparison to what you could put on the other, you could forget it.

360223 Q. How much could you store?

A. I do not know, against the building, with the building as it is built, I do not know.

Q. Have you made any computations, and can you in any way show this Master how this company could store a few months' supply of coal and exclude these properties which you exclude?

A. No, I have not figured that property up. I would state this, though, that they do not store coal on a great many of these, and so far as those are concerned where they store coal—

Q. They have not recently, because they could not get it.

360224 The Master: Don't argue with the witness.

Mr. O'Brien: That is the objection I have had, your Honor, all along, is this reading of his testimony into the record.

Q. Well, now, hypothetical question No. 3, Mr. Hine, that is on Sheet 10, I believe, your Honor, what you want to do there is to take that little parcel No. 2 and throw it out, is that it?

A. No. I say that parcel is not needed nor necessary for gas operations.

Q. That is a holder station there, the property as it stands, has been owned and used by the company in its gas business for over thirty-five years?

The Master: Has it, Mr. Hine? That is the question.

A. I don't know.

Q. Didn't you ascertain anything about that?

A. Why, I do not know. As it stands it is being involved, and you also state "and used." Certainly in 1918, and in prior times that little parcel at the side, Parcel 2, was not used.

The Master: What is the rest of it?

The Witness: It is occupied by a holder, a larger holder that practically fills the square.

The Master: Your point is that they have got 36026
50 feet too much there, is that it?

The Witness: Yes, they do not need that, since the pumping and heating station is gone.

Q. What is on Block 1457?

A. Lot 6?

Q. Yes.

A. Parcel 1.

Q. Parcel 1.

A. A holder.

Q. What is the property to the other side, toward First Avenue?

A. To the east, towards First Avenue?

Q. Yes. 36027

The Master: You mean on Parcel 2?

Q. Well, on the property, yes?

A. The property that the company does not own, or does not claim?

Q. Yes.

A. Buildings, residences.

The Master: Don't waste much time on that.

Mr. Ransom: I think not. It is a matter of coming in and paring out a few inches here and there.

Mr. Chambers: Do you call 50 feet a few inches?

The Master: I do, compared to the whole amount.

Q. Now, as to the hypothetical questions with respect to the 65th Street property, West End Avenue?

The Master: Where is that?

Mr. Ransom: That is Block 1157, Lot 1.

Q. Have you ever made any study of pressure conditions in the district to which gas is distributed from the West 65th Street station?

360029 A. I have made studies of the pressure conditions all over the Island of Manhattan.

Q. When did you do that?

A. From 1912, I believe I first did work in Manhattan, until the end of my connection with the Commission.

Q. You don't know anything about what the conditions were in that territory and district prior to 1912?

A. As to the pressure conditions?

Q. Yes.

A. No.

Q. You don't know to what extent distributing con-

360030 ditions in the territory dependent on the West 65th Street station have changed?

A. No.

Q. Well, before 1912, or after 1912?

A. No, I do not know specifically about that at all.

Q. You don't mean your answer then to apply to years prior to 1912?

A. In those various questions, 4 or 5, etc.?

Q. Yes.

A. Yes, I do.

Q. How can you speak about conditions of which you knew nothing and at a time when you have never

seen the property, and knew nothing of the distribution needs, or pressure situation, or anything of the sort?

A. Well, they had the two big holders there ever since 1906, and if they had those they could handle any pressure situation which arose that they handled with the combination of the six small ones and the two big ones, in my opinion.

The Master: What has that got to do with this easterly 300 feet? I understand they claim that is vacant, don't they?

The Witness: It is vacant now, but it was not before. 36032

Mr. Ransom: The holders have been retired since the—

The Master: These holders have been retired on 1157?

Mr. Ransom: Not the big holders, no.

The Master: There was a pumping station on the other three, was there?

The Witness: No, the pumping station is on the westerly side of the lot.

The Master: What was there heretofore on the easterly 300 feet?

The Witness: Six small holders, and their pumping station. 36033

The Master: When was that discontinued?

The Witness: It was written off the books in 1918, or 1917, I believe. I do not remember the specific date the testimony shows their use was discontinued. Sometime in there.

Mr. Chambers: It was written off then; it must have been discontinued long before.

The Witness: In 1917 they were written off.

Q. And discontinued?

A. I do not know as to that. That is not always the same date, by any means.

Q. Now, with respect to the Inwood holder—

The Master: Is that 300 feet clear now?

The Witness: Well, there are holes in the ground that are being filled in. I believe they are pretty nearly filled.

The Master: Are they useful?

The Witness: Yes, you could store coal up there, but there is no manufacturing plant there, the only coal they need is for the heating of these holders, and there is plenty of room for that coal storage, but they could use it for many purposes.

360.35 Mr. Ransom: Mr. Woods testified that the plans were under way for the use of that property or one or two alternative uses, which he described.

The Master: Go ahead.

Q. In respect to hypothetical question No. 5, did you take into account the testimony of Mr. Mrich that pages 507, 508 and 509 of the record as to the extensive construction and reconstruction work done at this station in the period from 1912 to 1916?

A. Question No. 5?

Q. Yes, Block 1157.

A. Yes, I took into account all those conditions.

360.36 Q. Well, are you able to state whether or not it was these improvements which made possible the later abandonment of the small holders, and the making available of that property for other purposes?

A. No. I would say this, though, that if the holders—in order to have the holders discontinued, that there would have to be some piping work done to arrange the situation there. That is of course true. I do not know specifically what was done.

Q. Up to the time these adjustments were made, are you able to say the holders were not needed?

A. I do not believe they were needed, no.

The Master: That is your opinion?

The Witness: Yes. That does not mean you would not have to make maybe a few changes in the piping in order to cut them out of use.

Q. No, but they were not needed?

A. I do not believe they were needed, no.

Q. And that is based, of course, on this assumption of yours, that storage capacity is only needed up to 75 per cent of the maximum day's send-out?

A. I said that was the minimum and then the figures showed what it was.

Q. Do you know anything about the pipe connections in that governor house? 36038

A. No, I do not.

Q. And did not?

A. No.

Q. Never have?

A. No.

Q. Now, with respect to the Sedgwick Avenue property, the precipitous and rugged portion of Block 3236, Lot 1, you say that the portion of that property not occupied by the holder and governor house is not needed?

A. Did I? I don't remember that. I do not remember ever saying that.

Q. You would not say so? 36039

A. I stated and will state again that the portion of the property north of a line 450 feet north of the southerly boundary would not be necessary for the purposes of that holder, and would leave some considerable space to the north of the holder.

Q. How about the property east of the holder?

A. And also that the part east of that holder would not be needed for the gas purposes of the company.

Q. What would you think the company ought to do with that property?

A. Well, that is entirely a different matter, I do not think it is needed for their gas purposes, that is all.

Mr. Chambers: We showed you by Senator Boylan.

Q. Well, if there was not any other practicable use of the property that was consistent with the use of the part occupied by the holder and governor house and so on, you would regard the whole thing as properly a portion of the property used by the company, wouldn't you?

A. Oh, if it had no value for other uses.

36041 Q. Well, not even if it had a potential value for other uses, but if such uses were harmful or undesirable from the viewpoint of the proximity of the holder and the governor houses?

A. Well, if they were harmful, yes, it could not be put to a harmful use.

Q. Would you advise putting an ice manufacturing plant within a few feet of that ten million cubic foot holder?

A. No, I do not believe that I would advise it, and I do not know whether—

Q. Would you advise putting—

Mr. O'Brien: Wait a minute.

36042 The Witness: I do not know, either what it would do to it.

Q. You recognize that there are hazards in connection with ice manufacturing plants?

A. Oh, yes, there are.

Q. You have heard of their explosion?

A. I have heard of their explosion and all sorts of things.

The Master: In other words you would not think of putting anything near that holder that was apt to catch fire or explode?

The Witness: No.

The Master: Garages would be a dangerous thing, wouldn't they?

Q. You would not put garages and gasoline storage, would you, on—

Mr. O'Brien: Just wait a minute. The Master asked him a question.

The Witness: I do not think a garage—it would depend upon the type of construction, and such things as that, and the care they took.

The Master: Well, it always has that element of danger depending on the character.

The Witness: Yes. 36044

Q. Do you think a permit could be obtained for the erection of a garage and gas storage, gasoline storage, so near to the holder?

A. I do not know as to the details there. I would not recommend such a thing as that, certainly.

Q. What?

A. I would not recommend it, a garage and gasoline storage station there.

Q. Or an ice plant?

A. Oh, yes, I think an ice plant right in that neighborhood—

Mr. O'Brien: I call the Master's attention at this point on the record to the location of the garage on 21st Street. 36045

The Master: I don't know anything about the location of a garage on 21st Street.

Mr. O'Brien: Well, you have a map before you.

Mr. Chambers: All you have to do is to go up and look at West 132nd Street, the Fifth Avenue Coach Company has a garage right alongside of the 132nd Street holder, and that property was sold to them by the Consolidated Gas

Company, it is within fifty feet of the holder, and it was finished last year.

Mr. Ransom: The situation is there, that up there there is a one-story building, and it is not on a hill which would bring the garage building right up by the tank.

The Master: Next question.

Q. This ten million cubic foot gas holder projects above the elevation of Sedgwick Avenue over 150 feet, doesn't it?

A. Well, it is a good deal higher. I do not know

36047 how many feet.

Q. Well, approximately 150 feet?

A. I should say probably more than that.

Q. And you would not advise the use of the remainder of this property for commercial purposes, which involved dangers or hazards of fire, etc.?

The Master: He has already answered that.

Mr. Chambers: Well, had he as to the remainder?

The Master: It is sufficiently covered.

Mr. Chambers: I would like to have him answer that.

The Master: I am not willing to spend any

36048 more time on it.

Q. Well, now, respecting Inwood—

The Master: Don't waste time on Inwood, it has been out of service for years.

Mr. Ransom: No. What do you call years? It has been out of service for a number of years, it has been out of service since 1912.

Q. Do you know when the Inwood holder was built? It was in 1892, wasn't it?

A. I do not remember the date. I had better refresh my memory on that. It was reported to the Public Service Commission as built in 1892.

Q. And it was to supply gas in that upper section of Manhattan as it was at that time, the area below the hill?

A. I can't answer why.

Q. Gas at that time came into that area from the 111th Street station, did it not, or don't you know?

A. I have gone over that, but I really do not remember; I should say probably it did.

Q. Wasn't the situation at that time this: That in order to supply that portion of Manhattan Island north of the hill it was necessary to send gas from 111th Street up over the Fort George hill, and then 36050 down?

A. I do not know that it would have to go over that.

Q. You did not take that into account, did you?

A. I took the conditions there into account, because of the conditions of the territory.

Q. And didn't you realize that there is a difficulty in the maintenance of pressure and supply, where you have to send gas up hill and then down hill?

A. No, it does not make any difference. There is a variation in pressure on account of elevation, but the higher up you go the higher the pressure is, and it does not make much difference whether it has to go up or down, it just affects it. 36051

Q. Are you willing to say that the engineers and officers of this company did not exercise good judgment in erecting, in 1892, this relatively small holder and governor house as a method of maintaining the pressure and supply of that district during the period that the gas had to go into the district over the Ft. George hill?

A. Well, in the first place, I think from information that I have that there was a holder there before that, and that they did some reconstruction work in 1892, and I do not believe that that was necessary, or

that it was necessary to take care of it that way. With the situation there, you might have used it, anybody might have used it.

Q. Going back to 1892, or as far as you went, supposing gas had to be brought into this district by that method, don't you as an engineer, if you regard yourself as such, recognize that a holder of this size in connection with a governor house in that territory might have been a very good way of maintaining pressure and supply on this district?

A. No. In my opinion, a holder of that size and in
36053 a territory of that description, and the way New York has been in these years, it was absurdly small.

Q. What do you know about conditions in New York at that time? You were hardly born at that time, were you?

A. I do not say at that time. 1910 is the first thing I speak of.

Q. You did not see this until when?

A. 1911.

Q. And when the Kingsbridge holder was built, so that the gas could be brought in the other way, they discontinued that holder and governor house, but you don't know what the conditions were in that Dyck-
36054 man Street area, so far as pressure and supply go prior to the time that you came to New York?

A. No.

Q. And you haven't made any examination of the records showing the difficulties of the company and their experience in sending gas over the Ft. George hill into this region of what is roughly called the Dyckman Street region?

A. No.

Q. And yet you assume to throw out this holder throughout all this period?

Mr. O'Brien: That is argument. I think we ought to have an end of this argumentative questioning.

The Master: Anything else?

Mr. Ransom: Yes, I have some more questions.

Recess.

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Afternoon session.

36056

WILLARD F. HINE, resumed the stand:

CROSS-EXAMINATION CONTINUED BY MR. RANSOM:

Q. Mr. Hine, have you ever made a study of the matter of reserve capacity, of the relationship between tank capacity and company requirements, in the case of any plant or system other than the Consolidated?

A. Not specifically. I have had to take that up in connection with applications for bond and stock issues, and as a minor question in several cases.

Q. In New York City?

A. The bond and stock issue cases were all in this city. 36057

Q. Those were cases involving the question of the amount which some company had expended for capital purposes and the extent to which an application should be granted for the issuance of securities based upon those expenditures?

A. Yes, as to the necessity of expenditures.

Q. Outside of the City of New York and the local companies to which you refer, have you ever made a study of the matter of reserve capacity?

A. Only generally.

Q. What companies within the city have you made any study of, do you claim?

A. The Brooklyn Borough and the Kings County, and it was an incidental factor in the New York & Richmond

Q. These were security applications for the capitalization of expenditures for additions of plant capacity?

A. Yes.

Q. And you say in those cases the Commission had to pass on the necessity of the additions to plant capacity?

36059 A. No, I don't know whether they had to pass on them or not. I should say they would have to if they were up and on the job. I reported as to the necessity of the expenditures and as to the reasonableness and necessity of the facilities that they contemplated securing, or that they had secured.

Q. Do you know of any case in which you reported that the facilities to which the application related were not necessary?

A. No.

Q. So far as plant capacity is concerned?

A. No.

Q. Do you know what the relation of plant capacity

36060 to maximum send-out was or is, in connection with any company as to which you have made a study?

A. No, I don't know that specifically.

Q. Do you know it specifically or any other way?

A. Well, generally, taking the Brooklyn Borough Company, for instance, they had two machines and then later a third machine. There their manufacturing capacity when two machines were running was considerably in excess of their maximum day so far, and of course that was necessary with so few machines.

Q. What do you mean, that it was in excess—how much?

A. As I remember they ran 25 or 50 per cent in excess of their maximum day. In the Kings County—

Mr. O'Brien: Why not let the witness finish that answer?

Mr. Ransom: He was starting in on another before I finished this one.

Q. Do you know the number and capacity of the machines?

A. The Brooklyn Borough, I believe, has three machines now. 36062

Q. Of what capacity?

A. Well, I don't know how they rate them. They have a capacity running full of about two million a day each. There are various and nominal ratings for those machines.

Q. How would you rate them if you knew how?

A. I know how, and I know how I rated them.

Q. Would you rate them?

A. From 1,800,000 to 2,000,000 a day, maximum.

The Master: How do you base that rating?

The Witness: That is what you can get out of a machine, and they have been able to increase the capacity of those machines as time has gone on. They didn't use to be able to make as much gas as they do now. 36063

Q. That is what they could get by running a machine to capacity?

A. Well, I think you can force that machine up to 2,200,000 a day for a time.

Q. For a day or two?

A. Yes, but I would say a fair rating on one of those would be 1,800,000 to 2,000,000 a day.

Q. And they have three of those machines?

A. I believe so.

Q. And according to Brown's directory their maximum day send-out was 2,454,000 cubic feet?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: Your Honor, I think we are getting into a lot of irrelevant speculation in going back to this orthodox Brown's College directory here.

The Master: I don't think so. The witness 36085 has testified that the statistics given there are reliable.

Q. Take the Kings County Lighting Company—you know that the Kings County Company has been in very great difficulties on its relation between capacity and send-out, don't you?

A. I have heard that said, that they were.

The Master: Where did you hear it said?

The Witness: Why, in 1918, at the time of the investigation before the Public Service Commission they claimed that they were in considerable difficulties, one of the reasons being that they have practically no storage capacity at the manufacturing plant, and they had a great deal of difficulty 36086 in getting the gas to the outside station, and there was also trouble in the plant connections themselves, in that they did not have engines to take them when their send-out jumped so quickly as it did in 1918, in that terrific winter.

Q. That is, they were in difficulty as to their storage capacity at the manufacturing plant?

Mr. Chambers: I object to this as incompetent, irrelevant and immaterial, trying out the Kings County Lighting Company case. I understand they have had their trial.

A. As I understand it, they said they were in difficulties with pretty near everything that winter.

Q. Do you recall what their maximum day's send-out was last year?

A. I don't know as I knew last year at all.

Q. That is 1918?

A. In 1918, as I remember it was somewhere around six million, I believe they got to.

Q. At the time you made your investigation what was their plant capacity figured in the way that you figured it?

A. I do not remember. 36068

Q. You can't even give a figure?

A. Yes, I can give a figure that would be approximately maximum of eight million to nine million cubic feet in twenty-four hours.

Mr. O'Brien: I want to object to this line of questions. You would have to try out each one of these plants to get a deduction that would be reliable.

Mr. Ransom: This witness has advanced an absolutely surprising theory that 5% reserve is enough.

Mr. O'Brien: His reasons are in the record, and they have such force as they ought to have. 36069

The Master: Objection overruled.

Mr. O'Brien: You can't prove it from the Kings County, can you?

Q. Do you know anything about their maximum day's send-out during 1918?

A. I told you I thought it was in the neighborhood of 6,000,000 cubic feet.

Q. 600,000, don't you mean?

A. No, I don't.

The Master: Kings County Lighting?

The Witness: Yes.

Q. Well, what other companies have you made a study of in New York City?

A. I don't believe I have studied that factor in detail in other places.

Q. In any other company anywhere else?

A. I have not taken that up specifically. I have always studied the relation between plant capacity and the number of machines that are there and all that. Anybody would get that naturally on every case he works on.

Q. Have you ever undertaken to ascertain what is
36671 the relationship between plant capacity and maximum day's requirement in any of these other larger cities?

A. Oh, I have had that, but I don't remember the figures.

Q. Can you give any idea as to what is the relation in Boston?

A. No.

Q. Or in Providence?

A. No.

Q. Or in Philadelphia?

A. No.

Q. Or in Minneapolis?

A. No.

36672 Q. Or in St. Louis, the Laclede?

A. No, I don't know what they have got there now.

Q. You have made this five per cent figure without any knowledge of what the relationship is in any other of these cities?

A. I have not.

Q. With respect to this investigation to which you have referred, made by the Public Service Commission in 1918, would you be surprised to find that the excess of the Kings County Lighting Company's manufacturing capacity over its maximum day's requirement was a little over 1,200,000 cubic feet?

Mr. O'Brien: I object to that as assuming facts not proven.

Mr. Ransom: He has referred to this investigation.

Mr. O'Brien: You are referring to some opinion gotten up by the politician Kracke, a man who by experience, by connections, by study, had no more business being a Public Service Commissioner or writing a decision on a technical subject than the man in the moon.

Mr. Goetz: How does a lawyer know?

Mr. O'Brien: He is a district leader in the 36074
Borough of Brooklyn, Kracke. You have taken Kracke's findings and have worked them into the question.

Mr. Ransom: The objection to district leaders will be noted.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. I say that these figures practically confirm what I stated before as to the capacity and the maximum day's send-out, but it must be borne in mind that the difficulty that plant works under is that they have a small holder at the works, and all the gas has to be pumped to their main station, which is a mile or a mile 36075
and a half away, and they have trouble getting it away from the works where they can store it. Another thing, they only have one plant.

Q. In any case where a company is making both coal and water gas, and has two or more plants, can you state what in actuality is the relationship between the maximum day's requirements and plant capacity even figured in the way that you figure it?

A. No, I haven't got those statistics.

By the Master:

Q. You ought to have them. You have testified in your opinion five per cent reserve is enough?

A. In this particular company.

Q. I want to know how you get at it; and how you base it, and what relation it has to the experience of other companies. You ought to give me that information?

A. That is a difficult thing to explain in that it involves a mental process. You can't just take statistics of companies of this size and that size and get at the result. Taking all these conditions here with the plants existing as they are, and distributed as they are, and with the main systems as they are, and consider-
3667 ing the way the load comes on with the climate that we have here, I think that would be adequate, covering the maximum day.

Q. Do you know of any other gas company anywhere in the United States that has so small a reserve as five per cent?

A. I can't point to them specifically now; I have seen figures

Q. As low as that?

A. I have seen them where they claim they didn't have anywhere they had a manufacturing capacity less than their daily send-out.

Q. But they wanted to cure that situation?

3667 A. Oh, yes, that is dangerous undoubtedly.

Mr. O'Brien: Judge, you were asking about the reason for it, and I refer to Woods' testimony as not very explanatory on this subject. He gave you an engineering judgment based upon his experience, and it was based on those things I suppose that a man develops from his experience.

The Master: Just now I am trying to get Mr. Hine's point of view and the basis of his statement.

By Mr. Ransom:

Q. Take the case of the Consolidated Company in

1917, would you have said that five per cent was an abundant reserve?

A. Well, as I stated before, you cannot take any specific year. A year does not necessarily mean anything when you consider the ups and downs of the maximum days, and other conditions. You have got to take this thing through a period of years, and you have also got to bear in mind all the time the increase that you are going to get one year over the other. You can find absolutely absurd results just taking particular years of any company, because of the fact that there is such a tremendous variation in different years. 36080

Q. Well, in the fall of 1917, if you had been connected with the Consolidated Gas Company in any capacity, and you found that it had a 5 per cent reserve, would you have advised that that was adequate?

A. For that year?

The Master: At that time.

Q. At that time.

A. Yes, but I would say this, that they would have to provide additional capacity to take care of what I would expect to be the increase in the next year. It is a continually growing process.

Q. And if in 1917 the company had, as you say, the 14th and 42nd Street plants in excess of a 5 per cent reserve, would you say that those plants were not needed and could be written off and disposed of? 36081

A. I would say that irrespective of those conditions those plants were useless, costing what they do, taking the time to fire up, considering the value of real estate in this city, and those other factors, I don't care what they have or what they didn't have. It is absurd to keep such plants as that.

Q. Take the fall of 1917, do you know that by February of 1918 the maximum day's output of the Consolidated Gas Company had increased so as to

exceed any prior maximum day by practically 28 per cent?

A. I don't know the percentage. I have heard it stated by the officers of the company that the maximum day in the early part of 1918, in that terrific winter, was much in excess of any maximum day that it ever experienced before.

Q. And that the maximum day of what you call that terrific winter of 1918 has progressed and advanced so that in the present winter it is 28.38 per cent over any other maximum day even including the
3608'3 maximum of February, 1918?

A. I don't know that.

Q. There are two increases of 28 per cent in successive years?

A. On top of each other?

Q. Yes.

A. No, I don't know that.

The Master: Wouldn't it take just as long to fire up any coal gas plant as the 14th and 42nd Street plants?

The Witness: Yes, but my idea would be that if you had a modern coal gas plant you certainly would not be leaving it down, it would not pay to
3608'4 keep a coal gas plant for an emergency, with that terrific investment.

The Master: You would use water gas?

The Witness: I would use water gas to take in the valleys and the peaks, because they can be fired quickly and produce gas.

Q. Do you know what the relation of investment to plant capacity is at 14th Street and 42nd Street as compared with other coal gas plants and water gas plants?

A. What investment?

Q. The investment per thousand cubic feet capacity?

A. Per what?

The Master: Per thousand cubic feet of capacity.

The Witness: I don't know what the investment is there. Per books?

Q. Per our books, do you know?

A. I don't know what the investment is there. I know that the investment is per your books.

The Master: How much is it?

The Witness: That is not the investment.

Q. How much would it cost to put up a water gas plant of 9,500,000 capacity—

Mr. Chambers: Just a minute. You want to know what the investment of those two plants is per their books? 36086

The Master: I do.

Mr. Ransom: In terms of thousand cubic feet capacity.

Mr. Chambers: He said he knew, and we will give it to you.

A. This is per their books.

Mr. Ransom: If they are depending on Public Service Commission reports—

The Witness: Is Teele accurate.

Mr. Ransom: Teele is very accurate, but if it is one of the socialist assemblymen from Weber's staff, look out for him. 36087

Mr. O'Brien: That is pretty harsh.

Mr. Clark: Where do you get that stuff?

Mr. Ransom: Don't you know that one of the men whose loyalty is chiefly attacked in this investigation in Albany was elected from Weber's staff? The men in the department say that no one but a socialist can get advancement there.

Mr. O'Brien: He is not on the staff now?

Mr. Ransom: No, but he was; he has been elected to the Legislature now.

Mr. Chambers: Who is that?

Mr. Ransom: Feigenbaum.

Mr. Chambers: He is one of five assemblymen who are on trial?

Mr. Ransom: No, but just read the record of his vote on war measures, as has been brought out in his testimony in Albany.

Mr. Chambers: You said he was under attack. You ought to be more careful of your words.

Mr. O'Brien: Did you say, that no one but a socialist can get advancement under the present
36089 Public Service Commission, or under the Public Service Commission in your day.

Mr. Ransom: I said it had been stated by men in that department that no one but a socialist could get advancement there.

Mr. O'Brien: How about it when you were there?

Mr. Ransom: I think it was about as bad when I was there, if you want to know.

The Master: We have had enough of this. Don't take any more, Mr. Stenographer.

The Witness: I am afraid I haven't got the information to answer the question.

36090 By the Master:

Q. Have you any impression at all as to what is going to happen in the oil market, Mr. Hine?

A. I wish I did—no, I haven't.

Q. If oil goes high enough what is going to become of the water gas business?

A. They have got to quit it.

Q. Then this water gas plant you would have as a reserve plant would be scrapped, wouldn't it?

A. No.

Q. What would become of that?

A. It seems to me that no matter what happens in the oil market that there will always be a necessity

for water gas machines to take care of fluctuations in demand, because the coal gas does not respond quick enough. But, the bulk of the water gas they would have to discontinue.

Q. Suppose oil goes to the point where it would be out of the question to keep a water gas plant running at all even as a reserve plant, then where would you be?

A. If it go as high as that they would have to give up carbureted water gas.

Q. Then you would have to go back and build a coal gas plant? 36092

A. Some people are claiming that they should build uncarbureted water gas plants, and take the low heat value gas that they get direct from the coke. It is water gas, except that they do not enrich it with the oil.

Q. I know, but when are you going to get the legislation in order to have that done?

A. Far be it from me as to when I would change legislation.

Mr. Chambers: Pardon me, they can use the B. T. U.'s now.

Mr. Ransom: That is a perfectly absurd statement there is no power in the world for that. 36093

Mr. Chambers: I want to set the Master right on that. Do you know that under the amendment to the Public Service Commission law they allow the Public Service Commission to permit companies to change to B. T. U.'s?

The Master: Yes—you will have to show me an amendment to the statute applicable in New York City.

Mr. Chambers: Yes, it is.

The Master: I will look at it later.

Mr. O'Brien: It surely is, your Honor.

Mr. Chambers: It raises the rate, etc., but outside of that the Public Service Commission here and in Albany, if that amendment is valid, have a right to change to B. T. U.'s.

The Master: We will argue that later.

Mr. Ransom: There is no amendment to the statute.

Mr. Goetz: You are all wrong on that.

The Master: Judge Ransom, will you ask a question?

36095 By Mr. Ransom:

Q. Then is it your answer that you are unable to give the investment of the Consolidated Company, as per its books, in the 14th and 42nd Streets plants, in terms of thousand cubic feet capacity? You haven't that data here?

A. I haven't the data as to the book costs of those properties.

Q. You said when you were on the stand before that from your judgment and experience in effect only an earthquake could put an entire gas plant out of business. Is that still your opinion?

36096 A. I believe that I did not say it just that way. As I remember my statement, I stated that I could not see how a plant built in units, as plants are built today, in large places, like the Astoria plant, how anything except a very remote contingency could put all the different units of that plant out. One machine could go down, all the machines in a house could go down but I don't see why both coal gas houses and the water gas plant should go down there all at once at Astoria, unless it was a very remote contingency.

Q. Have your studies in the period since you came to New York included any attention to the instances

I drew to your attention the other day, the explosion that took place at the Equitable plant, socalled, the 40th Street and First Avenue plant, that put the entire plant out of business, disabled it for a period of about three weeks?

Mr. O'Brien: I make the same objection to this, assuming in the question facts not proven.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. I don't know about that case.

By the Master:

Q. Do you remember it at all? 36098

A. No.

Q. Was it before your time?

A. I don't know when it was.

Q. Did you ever hear of it?

A. I don't remember whether I heard of that particular one or not. There have been several here in town. Of course you must remember that very often when a plant goes down there is no special hurry about fixing it up, and they fix it at their leisure.

By Mr. Ransom:

Q. That would not be the case in the winter?

A. That would depend altogether on the capacity they had, the necessity for getting the plant going. 36099
In some winters the system certainly had a great deal of excess capacity.

Q. If you had only five per cent reserve capacity, the disabling of an entire plant would create a very serious situation, wouldn't it?

A. It would come to the place where you would not want to leave it go on, because something might happen at another plant.

Q. Did you ever hear of the explosion at the East River plant at Ravenswood in October, 1895, which necessitated the shutting down of the entire plant?

A. I have heard of that explosion.

Q. And the explosion and fire at the works of the Central Union—have you ascertained the facts regarding that since you were here on the stand?

Mr. O'Brien: I make the same objection.

The Master: Same ruling.

A. No.

Q. Do you know that that explosion and fire shut down the coal gas plant for nearly two days, and the water gas plant for twelve hours?

Mr. O'Brien: I make the same objection. It
36101 is assuming facts that are not proven, and trying to read them into the record in the guise of a question.

The Master: Same ruling.

Mr. O'Brien: Exception.

A. No.

Q. Have you recently learned of the explosion not long ago in the blower at the Pelham plant which caused a shutdown of that plant for a good many hours?

Mr. O'Brien: I make the same ruling.

The Master: Objection overruled.

Mr. O'Brien: Exception.

36102 A. No.

Q. Have you ever made any study of accidents in other cities?

A. Not specifically. I have heard a great many of these, and seen a great many shutdowns caused by accidents.

Q. That has resulted in the shutting down of plants, and in the case of companies having only one plant it has meant a cessation of gas supply?

Mr. O'Brien: I make the same objection. These are matters that are not in the record and not in the testimony and not proved.

The Master: Same ruling.

Mr. O'Brien: Exception.

A. Well, personally I have never seen a little company with just one plant that ever cut off the gas entirely; they seemed to be able to get by with it and fix up the plant. It has happened, I have heard of accidents, but they are certainly very infrequent. Even little plants with everything in one teacup—

Q. Did you hear of the Richmond, Virginia, shutdown by accident in 1906?

A. No.

Q. Or the Omaha complete shutdown and cessation of supply in 1890? 36104

Mr. O'Brien: I make the same objection.

The Master: Same ruling.

Mr. O'Brien: Exception.

A. I have heard of the Omaha affair, but I don't know how general that was.

Q. And Atlanta, Georgia, in 1903, an accident which put them out of business and shut off the gas?

Mr. O'Brien: Same objection.

The Master: Same ruling.

Mr. O'Brien: Exception.

A. I heard of an Atlanta accident. I don't know that I have it specially in mind. 36105

Q. Or the Sheboygan, Wisconsin, explosion wrecking the purifying plant of the company, damaging the situation so that the plant could not be put back in operation for a number of days, during which the town was without gas?

Mr. O'Brien: I make the same ruling.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. I haven't any more of these in mind than I referred to before.

The Master: I don't think I will take any more of this.

Mr. Ransom: I think that is all.

The Master: Have you any re-direct, Mr. Chambers?

RE-DIRECT EXAMINATION BY MR. CHAMBERS:

Q. Mr. Hine, in these questions that were asked you in regard to gas plants in various cities, the day's make, etc., the size of the mains were not given there, were they?

A. No, I didn't see them on those pages of Brown's.

36107 Q. You were asked in regard to Baehr's testimony that the service was good. That was Baehr's testimony?

A. That was, yes.

Q. Did you make any comment on his testimony at the time, or did you agree with that testimony that he gave?

A. I did, I agreed with him, that generally speaking, the pressure conditions in Manhattan at the time of that investigation were good.

Q. That related to the pressure condition?

A. Yes.

36108 Q. Now, the law that you spoke of that no one could live up to was the law that was declared unconstitutional by the Supreme Court of the United States as you understand it?

A. That was my understanding, yes.

Q. The pressure requirements under the old statutes?

A. Yes.

Mr. Ransom: The present statute here under attack.

Q. That was declared unconstitutional, as you remember, away back in 1906?

A. That is my understanding, yes.

Mr. Ransom: Is it claimed by the Attorney General that that was declared unconstitutional before it was enacted?

The Master: The Attorney General will not answer the question but will proceed to ask another question.

Mr. Goetz: There never was any judgment of any Court declaring it unconstitutional.

The Master: And there was no comment by Mr. Goetz called for. Go on, Mr. Chambers.

Mr. Chambers: I think that is all. 36110

RE-CROSS EXAMINATION BY MR. RANSOM:

Q. This pressure requirement you referred to was the requirement in the Act of 1906 which fixed the rate for gas?

A. The so-called 80 cent law.

Q. Do you know of any judgment of any Court that enjoined that as unconstitutional?

A. No, I don't know how it was done.

Q. The size of mains is not given on your Exhibit 304, is it?

A. Yes.

Q. All of them?

A. Every one of them, I believe. 36111

Q. Do you remember Mr. Bachr's statement that it was a little broader than you have indicated. Mr. Bachr said, did he not, that the service as indicated by our pressure tests, generally speaking, was good?

Mr. O'Brien: I object to that as not proper, reading into the record some testimony not properly proven. We haven't the record here.

The Master: I will allow it.

Mr. O'Brien: Exception.

A. That does not mean any more to me than what

I just stated was my idea, that generally speaking the pressure was good.

Q. And the service as indicated by the pressure tests was good?

A. Of course, the part of the service that is represented by pressure must be good if the pressure is good. I don't see the distinction.

By Mr. Chambers:

Q. Do you know who fixes the pressure now, how it is regulated?

A. The pressure requirements that are now in effect
36113 are fixed by the Public Service Commission.

Q. How long back has that been so?

A. I think they were fixed in 1912, possibly the early part of 1913. They were fixed for Manhattan after this investigation by Mr. Bachr.

Q. You didn't have in mind that when you said that no one could live up to the pressure requirements?

A. Oh, no.

Mr. Chambers: That is all.

(Witness excused.)

Mr. Vilas: I want to substitute copies for originals of certain exhibits, in pursuance of an understanding had at the time Mr. Barnum was on
36114 the stand last. I have here copies of Exhibits 462 and 463 which I would like to have marked in evidence in place of the originals.

Also Exhibits 464 and 465.

The Master: That may be done.

Copies marked Complainant's Exhibits 462, 463, 464 and 465.

The Master: Mr. O'Brien, are you prepared to go ahead with the direct of Mr. Little, and finish that up?

Mr. O'Brien: I have had Mr. Little here for cross-examination.

36115

The Master: I am asking you whether you are ready to go ahead and finish up his direct?

Mr. O'Brien: No. If the Master says that I cannot examine him at some other day on some direct testimony, of course I will have to bow to your ruling.

The Master: I want to finish up the witnesses now.

Mr. O'Brien: Before Judge Ransom became ill Mr. Little was under cross-examination by him.

The Master: And then you came along with some more direct.

36116

Mr. Ransom: The cross has never been resumed.

Mr. O'Brien: Judge Ransom said he would take two hours with him when he was next on the stand.

The Master: I understand the situation. I want to know whether you are ready to go ahead with Mr. Little's direct. If not, I will continue the suspension of the cross for the time being.

Mr. O'Brien: To be frank with your Honor, I am not prepared to go on with that now.

The Master: Then I will suspend the cross. What else have you got?

36117

Mr. Ransom: We are ready for Mr. Cohen.

The Master: Mr. Cohen is busy.

Mr. O'Brien: I have a motion on tomorrow at ten o'clock, and whatever disposition is made as to tomorrow I would like to have enough time off to attend that motion and return here promptly from the Court House.

Mr. Ransom: Mr. Chambers said he was going ahead on Wednesday.

Mr. Chambers: I don't like to go ahead if Mr. O'Brien is not here, for that short time.

36118 Mr. O'Brien: I will state this—I will not press it if there are good reasons why you should not follow the suggestion—Mr. Little is here if you want to save time on cross-examination.

The Master: Are you not prepared to finish that cross?

Mr. Ransom: I want Mr. Little's complete story in before I resume my cross. Mr. Little while I was ill put in a large blueprint exhibit which puts a very different light on his original exhibit and some parts of his original testimony.

Mr. Chambers: I tried to have the trial sus-
36119 pended while you were ill.

Mr. Ransom: It hardly seems to have been prepared by the same person, and I want the third and complete instalment of Mr. Little before I cross-examine him on the first.

Mr. O'Brien: I have dealt frankly with the Court and I have told my position.

Mr. Ransom: So have I.

Mr. O'Brien: The further direct-examination, if I adopted some of the tactics of the complainant, I would forego, and just say he is ready for cross-examination; but if you have good reasons, if you want further time—

36120 Mr. Ransom: It is not a matter of time, I want the complete story.

Mr. O'Brien: I will show you a good example in saying you may take the time, although it will delay our further progress of the case.

Mr. Ransom: I will go ahead with Mr. Little whenever you say his direct is finished, but I do not believe, in justice to my client I ought to go ahead until you say the direct is finished. If he has any further direct bearing on the subject-matter of his first and second instalment of direct, I want them.

36121

The Master: Is the Rowland appraisal here?

Mr. Ransom: It is in court.

The Master: Let me have it.

Mr. Ransom: Let the Master have it, Mr. Alrich.

The Master: Where is the one that was offered in evidence?

Mr. Ransom: Mr. Maltbie has the original exhibit, has had for some days.

Mr. Chambers: I have it.

The Master: Are all these books and records the appraisal?

Mr. Ransom: Yes. 36122

The Master: What do you want to compare, Mr. Chambers? What part is it that you say is wrong?

Mr. Chambers: I have never seen that. I only have my suspicion.

The Master: You intimated to me that something had been put over on you.

Mr. Chambers: Yes.

The Master: Now, I want to know what it is that you suspect to be wrong.

Mr. Chambers: For the first thing, you won't find this affidavit.

The Master: Of course you won't find that 36123
affidavit as part of the Rowland appraisal.

Mr. Chambers: Now, I didn't know they had put in any such affidavit, there isn't a word in the record about it.

Mr. Ransom: It was referred to at the time.

Mr. Chambers: No, it was not, you said an authentic copy. I am speaking now of the affidavit of Paul Herfort.

The Master: Do you object to that affidavit?

Mr. Chambers: Yes. He draws conclusions in them.

361 24

The Master: *Then the matter contained* in the affidavit of Paul Herfort, verified the 9th day of December, 1919, in Exhibit 389, is excluded from the exhibit as no part of it.

Mr. Ransom: I except to that ruling.

The Master: Why should you? Is that any part of the exhibit?

Mr. Ransom: It is part of the exhibit.

The Master: No, I didn't take that as part of the exhibit.

Mr. Chambers: I now ask the Master to take that portion of the so-called Rowland report

361 25 which is styled "The Municipal."

The Master: What do you want to look at?

Mr. Chambers: Have you two maps there like that (showing)? You have two maps in color?

The Master: Yes. Those are photostatic copies of them.

Mr. Chambers: Have you got two there?

The Master: Yes, here is the other one

Mr. Chambers: What have you got next?

The Master: Real estate.

Mr. Chambers: In writing, is it?

The Master: In writing.

Mr. Chambers: I call your attention to that

361 26 part right there (indicating).

The Master: Yes.

Mr. Chambers: In somebody's handwriting.

The Master: 40 lots.

Mr. Chambers: Yes. That is not part of the Rowland report. That is in pencil on the margin, and that is here, just as if he announced when he offered this in evidence it was all written in longhand, and certainly that is not a part of this document. At least I am going to ask you to mark the original instead of the copy so

36127

that these things may be noted. They will become very important, perhaps.

The Master: We will note this on the record—that upon the original appraisal of the Municipal Company, corresponding to Exhibit 399-D, page 1, under "Real Estate" there appears two items, "On Block 226, Nos. 1 to 20 and 45 to 64, inclusive, 54 3/4 lots each 25 feet by 100 feet," and under that, "On Block 226-a, 40 lots, each 25 feet by 100 feet, 8 lots above water, 32 lots under water, together with the bulkheads, waterrights and full water grant to exterior City Line."

36128

There are two lead pencil marks similar to the two ink marks on the exhibit in evidence connecting the words "40 lots" under the words "on Block 226-a" with the figures "54 3/4 lots" under the preceding item "on Block 226" and opposite the item "on Block 226" in lead pencil appears "40 lots," corresponding with the ink statement "40 lots" on the exhibit in evidence.

Mr. Chambers: What I want to know is who did that?

Mr. Ransom: That all appears in the affidavit.

The Master: Opposite the words "on Block 226-a" in lead pencil "54 3/4 lots," corresponding to the ink statement "54 3/4 lots" on the exhibit in evidence. What else is there?

36129

Mr. Chambers: I do not know yet. That is why I was going through it. Let us take the next page. You better make a note about that—that is in red ink, somebody else has written that in (indicating).

The Master: On the page which begins "Forward 22,106—1,141,500" appears the words on the exhibit in evidence "included in the real estate

36130

valuation." These words appear on the original exhibit in red ink.

Mr. Chambers: And the "52,500" is stricken out with the same red ink.

The Master: Yes.

Mr. Chambers: Somebody has written that in and strickened that out. As to plants on Block 225 and 225a you have got some red memorandums on the margin, haven't you?

The Master: Yes; apparently no part of the exhibit. A memorandum that it was sold to people at different times.

36131 Mr. Chambers: I would like a notation made in the record of those red ink marks—that they appear there in red ink, and what they say—on the original. I do not see those on the copy. Maybe they are—yes, they are written right in here—no, let me get it right. Brick building 140 feet by 60 feet, 1 story—those do not seem to be there. Will you have a note made in the stenographer's minutes about those? Of course, I have a motion to make about it, too, that Mr. Rowland said that he did not make this appraisal at all contained in this one (indicating original), if I am right I can tell you which

36132 ones he had to do with and which he did not. It is not his appraisal at all; he so testified.

Mr. Ransom: Why do you make statements like that? Of course he said he made it, and there is his signature.

Mr. Chambers: He only made—apparently not mains and services.

Mr. Ransom: Will the Master read in what—

The Master: No, I am not going to read anything in now.

Mr. Chambers: When he offered this in evidence it was not my intention to permit him to

36133

offer in evidence this kind of a copy. All I said was that for the present—you see there I said I made my objections the same as if he offered the original, and I assumed that counsel was offering the original but would substitute a copy for it. But this is not that kind of a situation. I think your Honor will bear me out that it is not. I assumed when he offered it that Rowland had signed all these different documents.

Mr. Ransom: He signed the one you have got there. Read his signature and his certification.

Mr. Chambers: What does it say?

Mr. Ransom: On September 8, 1884. 36134

Mr. Chambers: You see, I had not seen this.

Mr. O'Brien: Who knows when that red ink inscription across the page was made?

Mr. Chambers: Who did that? That is what I want to know.

Mr. O'Brien: The red ink so-called certification—who knows that?

Mr. Chambers: He did not appraise mains and services. As we understand it, he did not appraise mains and services and meters, and does not say that he did.

Note upon the record, too, that we have had no copies of this except that a few days ago this 36135
so-called copy that was offered in evidence was handed to Mr. Maltbie.

Mr. O'Brien: I have not received any of these copies, Mr. Vilas, of the Rowland Appraisal, Exhibit 399-A, B, C, D, E, and F, have I?

Mr. Vilas: I could not say; I have not any in my possession.

Mr. O'Brien: Who delivered them here?

Mr. Vilas: I did not.

Mr. Chambers: Nobody; they were not delivered. No copies were given.

36136

The Master: Judge Ransom, do you claim that Rowland appraised the mains and services?

Mr. Chambers: I will show you his testimony if you are in doubt about it.

Mr. Ransom: They have those figures.

The Master: No, I am asking a perfectly simple question. Talking about Rowland appraisals, do you say that Rowland appraised the mains and services?

Mr. Ransom: Yes.

The Master: I never looked at this before.

Mr. Chambers: That is just it; I thought coun-
36137 sel was offering the original and substituting a copy as you will see from what took place on page—

Mr. Ransom: The certification is just the same in the exhibit as it is in the original document.

Mr. O'Brien: Let us not camouflage it, Judge. You have been asked the question by the Master and you have not come up frankly and answered it yet.

Mr. Ransom: I have.

Mr. O'Brien: You have not, and you cannot substantiate it.

Mr. Chambers: Here is what took place. On
36138 the record the following took place—

Mr. O'Brien: You might as well admit it and let us get along here.

Mr. Ransom: My understanding is that Mr. Rowland did make an appraisal of the mains and services, which represented the cost of the mains and services to the Consolidated Gas Company.

Mr. Chambers: The testimony in the case, which is already in evidence, is contrary to that.

Mr. Ransom: Whose testimony

Mr. Chambers: Mr. Rowland's Senate Document No. 47.

36139

Mr. Ransom: His testimony is not in.

Mr. Clark: Yes, it is.

Mr. Chambers: You are mistaken. We understand it is.

The Master: Your motion is to strike out these papers that were received in evidence, purporting to be copies of the Rowland Appraisal, and to withdraw your concession at that time?

Mr. Chambers: Yes, sir, on the ground that I was misled.

The Master: Your application relates to Exhibits 399-D, 399-E, 399-B, 399-A, 399-C and 399-F, I take it?

36140

Mr. Chambers: Yes.

Mr. Ransom: I object to the withdrawal of them.

Mr. Chambers: I just wanted to state what took place.

The Master: The Master states that in the light of the examination of the original documents and the questions arising, that might have been raised at the time that these were offered, I think it is only fair to relieve Mr. Chambers of his concession and consent at that time given, and that his motion be granted to strike out those exhibits, so that counsel for the complainant may

36141

be in the position they were, precisely as if the exhibits had not been offered at that time and are now being offered as part of their case; and to the end, further, that if a situation now develops that requires any further proof as part of their case, I will take it.

Mr. Ransom: Well, I do not know of any concession that was made upon the part of Mr. Chambers at that time.

The Master: Yes, he permitted you to offer in evidence copies instead of the originals.

36142

Mr. Ransom: Well, we have put the original in.

The Master: I am granting his motion to strike it out because I can see some questions arising up on the offer of the originals that may require a little different ruling.

Mr. Chambers: I have found it. This is what took place—

The Master: I do not think Mr. Rowland ever appraised the mains and services.

Mr. Chambers: He has sworn he did not. May I just call your attention to what took place at the time, on page 8348 of the printed record. Mr. Carter was on the stand and Mr. Ransom was examining:

36143

"Q. Are you familiar with the Rowland Appraisal as it was at that time made?

"Mr. O'Brien: Same objection.

"The Master: Same ruling.

"Mr. O'Brien: Exception.

"A. I am.

"The Master: You need not repeat your objections, Mr. O'Brien, to this line of questions. They will be taken subject to your objections already stated.

36144

"Mr. O'Brien: All right, sir.

"The Master: You are familiar with it?

"The Witness: Yes, sir.

"Q. Have you produced here an authenticated copy of the original appraisal as the same has been received in evidence in the various Senate proceedings and in the prior suit?

"A. I have.

"Mr. O'Brien: Is there any difference, Judge Ransom, between that and the one that is in the printed reports?

36145

"Mr. Ransom: Which printed report do you refer to?

"Mr. O'Brien: The report you have just offered in evidence.

"Mr. Ransom: I think there are a few slight typographical errors in the copy of the Rowland Appraisal as printed in the Supreme Court of the United States.

"Q. Is the original Rowland Appraisal in your custody?

"A. It is.

"Q. And this is a correct and authenticated copy thereof (handing witness)? 36146

"A. It is.

"Mr. Ransom: I offer in evidence the Rowland Appraisal.

"Mr. O'Brien: It is understood I am objecting to all these questions, your Honor, and taking an exception.

"Mr. Chambers: I object to that as irrelevant, incompetent and immaterial. There is no proof here—

"The Master: Does your objection go to the point of insisting that the original be produced rather than the authenticated copy?

"Mr. Chambers: No. It is incompetent, ir- 36147
relevant and immaterial, hearsay and secondary evidence. Rowland, if he is living should be produced for cross-examination; if he is not we are deprived of the right of cross-examining him, and there is no proof that he who made it is dead.

"The Master: I will overrule the objections.

"Mr. Chambers: Exception.

"The Master: Noting on the record that, as I understand it, the objections do not go to

36148

the point of insisting that the original appraisal be produced instead of this copy.

"Mr. Chambers: We make our objections the same as if he had the original here.

"The Master: You included in your objection the words 'incompetent' and 'hearsay.'

"Mr. Chambers: That is correct. We assume he is offering the originals.

"Mr. Ransom: We will have to have these separate sections of the report marked separately."

The Master: The trouble with it is this, Mr

36149 Chambers, that I think some of the questions that arise now could have been raised upon the offer of that so-called authenticated copy. I think perhaps you should have taken time to look at it and familiarize yourself with it at that time.

Mr. Chambers: I do not think he had the original there then, I do not know.

The Master: No, the copies themselves show some of the questions that arise. But I do not want this case to have in it any question of counsel having been misled anywhere. I can see where when these things were put in some points

36150 may have escaped counsel, and I do not want to deprive counsel of the opportunity of raising these questions. I would like to have the record complete as to this Rowland Appraisal without any undue haste about it. I am going to leave the situation open about these exhibits, as though they had never been offered. So Judge Ransom can now offer the originals, or copies, as he sees fit. The complainant's case is now reopened for the purpose of fixing up this Rowland Appraisal situation.

Mr. Ransom: In view of the ruling of the Master, I now ask leave to withdraw from the

36151

record any portions of Senate Document No. 47 which have been received in evidence, that document having been offered in evidence, or the portions of it which were offered and received, only because these exhibits in connection with the Rowland Appraisal have been received.

Mr. Chambers: And I object to that. We are only dealing with the so-called Rowland Report and that is all.

The Master: The motion will be denied.

Mr. Ransom: You have stricken out the document to which these relate.

The Master: I am giving you permission to 36152
reoffer them.

Mr. Ransom: I do not just see why the defendants may at this stage of the case, when we assume we are at the close, nearly, of the defendant's case—long after it should have been closed—withdraw what your Honor characterizes as their consent or lack of objection.

The Master: I think this Rowland situation is so confused and the record on it so unsatisfactory, that it ought not to remain as it is; and I am of my own motion striking out these exhibits as they stand and reopening the complainant's case so that you can perfect your rec- 36153
ord.

Mr. Ransom: Then I ask leave to withdraw at this time, in pursuance of your Honor's ruling, the documents which were based on it and were offered only because of the receipt of these copies of the Rowland Appraisal and the fact that the Attorney General and the other defendants have taken the attitude they did with respect to the receipt of it.

The Master: That motion is denied.

Mr. Ransom: Exception.

36154

The Master: You have permission to reoffer these exhibits or any part of them.

Mr. Ransom: We may not want to offer them.

The Master: All right, then don't.

Mr. Ransom: But the documents which are in with them and because of them ought to go out.

The Master: I do not know why you offered the other documents.

Mr. Ransom: It was stated. We threshed that all out.

The Master: Motion denied, Judge Ransom.

36155 Mr. Ransom: Exception.

The Master: Do you want to make any offer with reference to these exhibits?

Mr. Ransom: The only offer I have to make at this time is the request which I have made.

The Master: Do you want to rest your case now? I have reopened the complainant's case to give you an opportunity to put in anything that you want with reference to it.

Mr. Ransom: I had not asked for any reopening of my case at this time.

The Master: I have done it of my own motion, so that there cannot be any misleading of counsel or any undue advantage taken. I want this record to be reopened now, and complainant's case is reopened, and I want counsel for the complainant to put in anything he wants, either offering the authenticated copies or the original exhibits, or any part of them, as part of your case, as if they had never been offered before.

36156

Mr. Ransom: This reopening on your motion, in a matter of five seconds or five minutes the whole matter is quite a surprise and your Honor's attitude is rather unintelligible.

Perhaps after I have read the record I may be able to understand it. 36157

The Master: Then I am going to make it perfectly clear. Taking the Municipal book, so-called, there are notations in lead pencil and in red ink.

Mr. Ransom: Which appear to have been made at subsequent times, relating—

The Master: I do not know anything about it.

Mr. Ransom: They show on their face.

The Master: No, they do not. On the page having the words "included in real estate valuation" the figure "525" was stricken out. The 36158
words "included in real estate valuation" are not stricken out in the copy that was offered in evidence.

On the following page there is a red ink bracket opposite two figures. When we get down to the certificate of Mr. Rowland I find that his certificate is limited to the matter which preceded it, namely the valuation of the plant, and has nothing to do with mains and services.

The Master was misled into believing that this appraisal included in a certificate by Mr. Rowland that he had appraised the mains and services. I never looked at the copy of the exhibit. I 36159
should have raised the question myself if counsel had not. The record is unsatisfactory and I won't permit it to stand that way, and I do not think counsel for the complainant ought to have it stand that way. That is all there is about it—I won't let it stand that way.

Mr. Ransom: We have offered the appraisal. If he did not appraise them, why, then I assume it is not there.

The Master: Now, the record speaks for itself. I have granted the motion to strike out

36160

these so-called authenticated copies of the Rowland Appraisal, so-called; I have opened the complainant's case to give complainant the opportunity to offer any proof it desires with respect to these exhibits.

Mr. Ransom: I assume in view of the fact that this matter is raised suddenly and without any indication that it was to be raised at this stage of the case, your Honor is not going to limit me to my action within the next few moments?

The Master: No, if you say you want an ad-
36161 journment until tomorrow morning, I will grant it.

Mr. Ransom: Well, I would like a day or two to look over the situation and be advised as to what, if anything, I shall do.

The Master: As the complainant's case is still open, I cannot ask counsel for the defendants to proceed with their proof.

Mr. Ransom: I do not see just how the complainant—

Mr. Chambers: I ask that we adjourn until he makes up his mind whether to close his case or not.

36162 The Master: Don't you want me to reopen it?

Mr. Ransom: I would like to have the matter either held open or allow me to make a later application to open in this respect if I reach the conclusion that it is advisable. All that I do not want to do is with respect to a matter of this sort, in view of your Honor's ruling that these documents go out and that other documents which are based upon them stay in—I do not want to act on that on the spur of the moment, at half-past three in the afternoon. I may be able to decide what I want to do tomorrow morning. I may want to deal with it later.

36163

The Master: I cannot very well go on with the defendants' case until the complainant's case is finished.

Mr Ransom: If your Honor takes that view, we will act tomorrow morning.

The Master: Then we will adjourn until 9:30 tomorrow morning.

Mr. O'Brien: Your Honor, will you make some provision that will allow me to go to court at ten o'clock and come back here.

The Master: Where have you got to be at ten o'clock?

Mr. O'Brien: In Part XIV.

36164

The Master: Before Justice Greenbaum?

Mr. O'Brien: Yes.

The Master: What is on there?

Mr. Chambers: The motion to reopen the Kings County case, is that it?

Mr. O'Brien: Yes, I have got to be there. After I come back from court I will be ready to proceed with Mr. Cohen or Mr. Little.

The Master: We will adjourn until 9:30 tomorrow morning. If Judge Ransom concludes to put in any further proof as part of his case, we will wait until Mr. O'Brien gets here. If Judge Ransom concludes not to offer any further proof as part of his case I shall expect Mr. Chambers to go ahead with such witnesses as he may have.

36165

Mr. Chambers: If the Master please, you will not require me to go ahead until he decides whether to close his case or not?

The Master: No, but I want your witnesses here in case he decides to close his case.

Mr. Chambers: In the forenoon?

The Master: Yes, at 9:30. If Judge Ransom comes in tomorrow morning and says "I rest,

36166

I do not want to offer any more as part of my case," I want you to go ahead with your witnesses. Ordinarily I should not have disturbed this situation in view of what happened, but I think this is too important.

Mr O'Brien: Meanwhile, I would like to make two or three requests. One is that the complainant furnish us with copies of this appraisal.

Mr. Ransom: We will not. Anything that is not in evidence you won't get.

Mr O'Brien: I mean assuming you are going to press it tomorrow, I would like to have

36167 a copy. The second proposition is that I want to have the company turn over to Mr. Edgerton the pressure sheets for December, 1909, that he has requested and up to the present time has not been able to get. The third one is that I get some answer to the request made many days ago that we be permitted to make photographs of the Astoria plant.

Mr. Ransom: The last question has been finally answered. Mr. Edgerton has had anything that the company has got. If he cannot understand it, it is his fault.

Mr O'Brien: I will have to controvert that

36168 with you, Judge—that he has not got it. We want all the pressure charts of the complainant company for the month of December, 1909.

The Master: Mr. Ransom has stated in that connection that Mr. Edgerton has had all that they are able to give you.

Mr. Ransom: If there is anything else that he will describe or indicate, that he thinks he wants, we will try to get it for him.

The Master: How about the photographing. Mr. O'Brien has been asking for? Have you reached a conclusion on that?

36169

Mr. Ransom: I have.

The Master: Suppose you put that on the record and get that out of the way.

Mr. Ransom: That we will not permit it.

The Master: That disposes of that. All of your three requests have been disposed of. You will get a copy of the exhibits if they are offered in evidence; Mr. Edgerton will not get any more; and you won't have an opportunity to photograph any more of Astoria.

Mr. O'Brien: If we do not get the pressure charts, we will not get them, but the record will indicate it.

36170

Your Honor, I have another request to put upon the record. I have not received a definite reply from the company through Mr. Davidson as yet as to my request, my personal request, made on Saturday last, February 7th, for the final data Utilization Department pay rolls for 1918 and 1919, the underlying data for expenses of Utilization Department other than salaries for 1918 and 1919, expenditures of the Mutual Aid Society for 1918 and 1919, reports daily, weekly, monthly and yearly of the Garage Department for 1918 and 1919, and all underlying data of the Garage Department covering expenditures for 1918 and 1919.

36171

The Master: Those requests have been noted on the record and we will adjourn until 9:30 tomorrow morning.

Adjourned to Wednesday, February 11, 1920, at 9:30 A. M.

Last Complainant's Exhibit 466.
Last Defendants' Exhibit AA-371.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 36175

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, February 11, 1920.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 36176
MR. O'BRIEN, of Counsel for defendant Swann.

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Mr. Ransom: I offer in evidence, from Senate Document 47 of 1886, Exhibit 398, Appendix H, entitled "Schedule of Appraisements and Valuations of the Constituent Companies forming the basis of the Consolidation, Manhattan A, New York B, Metropolitan C, Municipal-Knickerbocker D, Harlem E." 36177

The Master: They will be deemed in evidence.

Mr. Chambers: Aren't you going to give me a chance to object?

The Master: Part of the same Senate Document that you are using.

Mr. Chambers: Well, I used it because he used it first.

The Master: I don't care who used it first.

Mr. Chambers: Well, I want to object to it as

being irrelevant, incompetent, and immaterial, and as hearsay.

The Master: If you want me to strike out all of Senate Document 47, I will do it; if you want me to take it in, I have got to take it all in, either part, you cannot fish and cut bait at the same time; nor can you eat your cake and have it at the same time.

Mr. Chambers: Exception.

Mr. O'Brien: That sounds like Van Brunt. I will say the Honorable Van Brunt, successor to the Honorable Ingraham, to keep within the law.

36179

Mr. Ransom: Will this be separately marked, or considered as part of Exhibit 398?

The Master: Considered part of that exhibit.

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ROBERT A. CARTER, recalled:

DIRECT-EXAMINATION BY MR. RANSOM:

Q. Mr. Carter, upon the commencement of business of the Consolidated Gas Company, in November, 1884, was any record made in its books of account, as to the valuation of the property acquired by it under the consolidation agreement?

36180

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial.

The Master: I will overrule that objection.

Mr. Chambers: Exception.

A. There was.

Q. Complainant's Exhibit No. 1, the agreement, Mr. Carter, to your knowledge at that time were those entries correctly made?

Mr. Chambers: I object to that is incompetent, irrelevant and immaterial.

The Master: Correctly made in what sense?

Mr. Ransom: In the books. The values were fixed by the consolidation agreement, and I am asking whether they, to his knowledge—

The Master: The total?

Mr. Ransom: Yes, the total.

The Master: In other words, whether the total fixed by the consolidation agreement was carried into the books?

Mr. Ransom: Yes.

The Master: I will allow it.

Mr. Chambers: Objected to as incompetent, 36182
irrelevant and immaterial.

Mr. O'Brien: Same objection.

The Master: Objection overruled.

Mr. Chambers: Exception.

Q. To your knowledge, was that entry correctly made?

A. It was.

Q. Now, have you produced in court the book of account of the Consolidated Gas Company containing the opening entries made in 1884 of the cost to the Consolidated Gas Company of the properties acquired by it from the several companies under the consolidation agreement? 36183

A. I have produced such a book.

Q. Is this the book?

A. It is.

Q. And you have opened it to the entries pages 1 to 21, of that book?

A. I have.

Q. Is that correct, Mr. Carter?

A. Yes, sir, it is correct.

Q. What book of account is that?

A. It is the journal.

Q. To your knowledge, is this book which you have produced the original?

A. Yes, sir.

Q. Do you know in whose handwriting the opening entries were made?

A. I do.

Q. Whose handwriting?

A. Samuel J. Young.

Q. Is he alive?

A. He is not.

Q. Dead?

A. He is.

Q. This book has been under your control, or under
36185 your observation, from that time to the present time?

A. It has, yes, sir.

Mr. O'Brien: Did you say control and observation?

Mr. Ransom: Well, or custody. I offer in evidence pages 1 to 21 of this first journal of the Consolidated Company, produced by the witness, containing the entries to which he has referred.

Mr. Chambers: In the light of past experience, I would like to look at it carefully.

By the Master:

Q. Do I understand Mr. Carter's testimony to be that in so far as the entries in these books relate to
36186 the supplies taken over, and to the debts, they give the accurate figures?

A. Yes, sir.

Q. Of your own knowledge you know that?

A. Yes, sir.

Q. It is not a question of depending upon somebody else's appraisal?

A. No, they were actually property taken over, and the schedules are in the files, of the properties, which were filed in accordance with the consolidation agreement.

Q. Well, were you familiar with those properties?

A. Oh, quite familiar.

Q. And were you familiar with the entries when made?

A. Exactly so.

Q. Did you know they correctly stated the properties that were acquired, and the debts, and value of merchandise?

A. They did at that time, yes, sir.

Mr. Chambers: I object to that last question as incompetent, irrelevant and immaterial. It is obvious that he doesn't know of these different 36188
materials that were taken over, and that that was the value of them.

The Master: Materials?

Mr. Chambers: Yes.

Mr. O'Brien: Why, we will have to go into a very thorough examination of this matter, your Honor.

Mr. Chambers: It cannot be swept into the record like that. I object to that as incompetent, irrelevant and immaterial, and Mr. Carter is not qualified to state the values of those different materials like gas stoves and meters and services and pipes that came from these other companies, 36189
and I move to strike out any answer he made, so that my objection may be timely.

Mr. O'Brien: And I further move to strike out all of the questions and answers that have just been asked in their interrogation of the Master, the last five questions and answers. Your Honor has quite emphatically expressed himself on the value of journals, even current journals of the present day, kept by men who are alive, and who may be brought here to testify, you have commented upon their unreliability, and I want

to call further your Honor's attention to the fact that they produced this book which the witness says was under his control and observation all the time, and not the books that we sought to have him produce of the constituent companies, which were known to have been in existence at the trial of the original 80 gas case.

By Mr. Ransom:

Q. Mr. Carter, under the accounting system as it was originally initiated, this journal corresponds to what would not be called a ledger?

36191 A. No. We carry a journal of that kind at the present time.

Mr. O'Brien: I further call your Honor's attention to the various insertions, or at least the statements made there is the journal which embody matters of adjustment, matters of appraisal, and matters of opinion, and must be verified by somebody who made them before they could be accepted.

Mr. Ransom: Under the consolidation agreement there were certain properties, valuations of properties, agreed on as representing the fair value of various kinds of property. There was

36192 provided as to physical tangible properties other than land, that there should be delivered schedules. Those schedules are the so-called Rowland and other schedules.

The Master: Let me interrupt you. You contend that this is relevant as showing the prices agreed upon at that time.

Mr. Ransom: Yes, as showing that, and as showing what was done, showing the opening entries which showed the cost of these properties under the consolidation agreement to the Consolidated Company.

36193

The Master: You do not offer it as proof of value, except as you claim that cost is part of the value?

Mr. Ransom: The consolidation agreement fixed the cost of these companies and the schedules that were delivered as to the kinds of property for which the consolidation agreement provided that schedules should be delivered, those schedules were carried into the books, and these show the cost to the company as shown by its books, as of the opening entries.

Mr. Chambers: I take it that Mr. Carter's answer that he made to the last question put by 36194
the Master is out now?

The Master: No, you cannot assume anything of the sort.

Mr. Chambers: Well, I did not have a chance to note my objection.

The Master: Well, I am overruling your objection.

Mr. Chambers: What is that?

The Master: I am overruling your objection.

Mr. Chambers: And letting him say that all of these figures are correct?

The Master: I am letting—

Mr. Chambers: Of the properties and the value 36195
and so forth of these supplies and meters?

The Master: The value agreed on.

Mr. Ransom: The deeds which were put in evidence—

The Master: I will modify my question accordingly. It was the value agreed on?

The Witness: It was the value agreed on in respect of so much—

Mr. Chambers: Wait, Mr. Carter, will you? To that I object as incompetent, irrelevant and immaterial, as a self-serving declaration, hearsay

361[96]

The Master: The objection overruled.

Mr. O'Brien: May I ask your Honor to rule upon my motion to strike out all of the questions you asked?

The Master: Motion denied.

Mr. O'Brien: Exception.

The Witness: It was the valuations agreed on as to all other properties and materials and supplies and accounts receivable, appliances and property of that nature, which were independently scheduled as of November 10, 1884, were very carefully audited and checked and proved, and

361[97] the fact of their existence established by their subsequent use in the business.

The Master: How was the price fixed on those things? That was by agreement, was it?

The Witness: Oh, yes, by agreement, as to the price of those things. If it was coal, it was at the cost of coal; if appliances, it was at the cost of appliances. I might say that the full amount of these other supplies which is stated here on page 3, if I am not mistaken, aggregated $1,542,000 for all of the companies, and is made up of that class.

Mr. O'Brien: Just a minute, Mr. Carter. This

361[98] is not yet in, this paper that you are reading these figures from and I move to have the answer stricken out as putting in the record figures from this book not yet received in evidence.

The Master: Motion denied.

Mr. O'Brien: Exception.

The Witness: If you will permit me, your Honor, this is simply a schedule. The entries in the books correspond with those figures appearing, for example, in the case of the New York Company, the entry charges various accounts and credits the New York Company.

36199

The Master: I will receive these 21 pages.

Mr. Chambers: Just a minute, I haven't made my objection to it. I object to it on the ground it is incompetent, irrelevant and immaterial, a self-serving declaration, hearsay and secondary evidence, no proof to offer that the man who made it kept accurate books of account, or accurate books.

Mr. Ransom: The defendants have made up and have placed in evidence partly during the complainant's case and subsequently schedules and computations based on the cost of the property or the company's investment, running over and 36200
based on these entries and subsequent additions and withdrawals, and also various computations based on the company's withdrawals of property included within these opening entries, using these opening entries as a basis.

Mr. Chambers: I would like to say this, that the situation which confronts us is this, that had it not been for the fault of the complainant's counsel in offering that Rowland report in the manner in which he did, we would not now have had any evidence in here now before the close of his case. He cannot take advantage of the situation now to claim some advantage over us 36201
because some of our evidence is in prior to the closing of his case.

Mr. Ransom: Well, of course, the fixed capital account as of December 31, 1908, required by the Commission under the uniform system of accounts, which was gone into quite thoroughly on the complainant's direct case, was simply a bringing down to that date of these opening entries.

Mr. Clark: We have never had these opening entries, and never saw them.

36202

Mr. Chambers: They have never been offered before. We have used some of your books as an admission against interest. Here it is February 11, 1920.

The Master: The first 21 pages are offered, Mr. O'Brien.

Mr. Chambers: And you have not closed your case yet, because of your own fault.

The Master: I will hear any objection Mr. O'Brien has.

Mr. O'Brien: I object to the admission of the book, on the ground it is incompetent, irrelevant and immaterial, and on the further ground that

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it contains appraisals and valuations and other statements here that have not been substantiated by proper evidence in this case; that it embodies interpretations of agreements, that it makes express reference to other papers and schedules not offered with it in evidence; that it assumes the correctness of figures and statements made in other schedules or records; on the ground that there is no proof before the Court as to the mains, meters, services, plants, piers, bulkheads and water rights, office buildings, office furniture, laboratories, etc., and franchises; on the ground that

36204

it has other statements which have not been proven. For illustration, the following inscription, "From the amount of authorized capital, $45,000,000, there is deducted the amount apportioned to the New York Mutual Gas Light Company (which failed to comply with the conditions of the agreement to consolidate)." It contains allocations of property to the several companies, the New York Company, Manhattan Company, Metropolitan Company, Municipal Company, Knickerbocker Company, Harlem Company, that have not been substantiated by any

36205

evidence in this case. As a further illustration of objectionable features in this book now offered, I cite the following, which would have to be established by proper proof, on page 2, "The foregoing tables were modified in the following respect, that is the Municipal Gas Light Company by reason of an assignment from and by the Knickerbocker Gas Light Company to them became entitled to receive $1,863,000 of stock to be issued to the said Knickerbocker Company, making the amount of stock to which these Municipal Gas Light Company was entitled, $6,635,000. Of this last mentioned amount, the Consolidated Gas 36206
Company retained $35,000 to provide means, to pay indebtedness or obligations of the Municipal Gas Light Company of that amount."

In further support of my objection, I call your Honor's attention to the variety of statements made in the tables set forth on page 3, which should be properly substantiated by inventories and by appraisals duly proven here. This table covers not only matters due from consumers, but gas material on hand and various street department materials, and a great deal of other data which is dependent upon the books and records of the constituent companies for their reliability 36207
and their integrity, and they have not been properly proven, and therefore this book may not be received. Another instance of the error which would be committed in accepting this book under the statement made by the witness Carter found on page 6 where the entry reads, "Sundries Dr. to Knickerbocker Gas Light Company. For value of property transferred to Consolidated, as per their description in schedule, filed by them." All through it, on all these pages, the reference is made to schedules or statements that are extraneous to this book.

36208

And I urge further, without reiterating the same objection which I did to the receipt of the accountancy exhibits of the witness Teele, I think on September 17, 1919, in the record. If your Honor may permit it, I would like to ask the witness a few questions before you receive this.

The Master: No.

Mr. O'Brien: Well, they will have to come up in cross-examination, and it might be just as well to have them here now, it might be just time saved, all the witness said is that he knew Samuel Young, and knew his handwriting.

36209

The Master: Any other objection you want to note on the record?

Mr. O'Brien: That will cover everything.

The Master: Objection overruled, pages 1 to 21 inclusive will be marked in evidence as Complainant's Exhibit.

Mr. O'Brien: Your Honor, I ask if you receive them as evidence of value?

The Master: I decline to make any statement other than I have already made.

Mr. O'Brien: Do you receive it as evidence of the value of these properties?

The Master: I will state in my opinion what

36210

I receive it as.

Mr. Clark: I join in that objection.

Mr. O'Brien: I thought you were going to make a decision without opinion.

The Master: Mark these, please. Does an opinion have to be in writing?

Mr. Chambers: Exception.

Mr. O'Brien: Exception.

Mr. Clark: Exception.

Marked Complainant's Exhibit 467.

Mr. O'Brien: Your Honor made a remark, I think it will be found in the evidence, that it was not being received as evidence of value.

36211

The Master: Then the record speaks for itself, doesn't it?

Mr. O'Brien: Well, it was in a fleeting moment, and I do not know how definite it is.

The Master: Well, when you look at the record you will make up your mind how definite it is.

Mr. O'Brien: I don't want any veriform appendix left in this case, if I can help it.

The Master: There won't be any veriform appendix after I start chopping it.

Mr. Chambers: I say on the record that the Master, I think, will appreciate the fact that here 36212
is a new document, containing many important items, that has come into the case for the first time, and we have prepared our case, of course, along the lines of plaintiff's evidence as introduced when he rested. Now, the case is reopened, and he not only offers in evidence the Rowland report, about which we could not, of course, claim so much surprise, because something was in it that looked something like the so-called Rowland appraisal, but was not; but as to this new piece of evidence, Complainant's Exhibit 467, the situation is not the same. Here is a piece of evidence important enough for complainant to 36213
offer it in evidence here on February 11, 1920, and I think in the first place we should have a copy of those pages 1 to 21 presented to us at the earliest possible moment; and in the second place we should have an opportunity to examine them, and in the third place, after such examination, we should have an opportunity to cross-examine Mr. Carter.

The Master: Well, we will go right ahead just now. What else have you got?

Mr. Ransom: That is all.

CROSS-EXAMINATION BY MR. CHAMBERS:

Mr. Chambers: I would like an opportunity to examine it a little bit.

The Master: I am giving it to you now.

Mr. Chambers: Giving me a chance to examine it?

The Master: Yes.

Mr. Chambers: And do you expect me to cross-examine him at the same time?

The Master: Yes.

Mr. Chambers: It seems as though we ought
36215 to have a little time.

The Master: No.

Mr. Chambers: Well, what about copies of it?

The Master: That is a different proposition. I am going to discuss that when you get through with Mr. Carter, but not now. Have you any questions of Mr. Carter?

Mr. O'Brien: Will your Honor take an adjournment until two o'clock?

The Master: No.

Mr. O'Brien: It will take that much time to get some lunch.

36216 The Master: Not up here. You can get lunch in half an hour up here.

Mr. O'Brien: Where?

The Master: Delmonico's. I had lunch there in a half hour yesterday, and then sat around half an hour before coming back here.

Q. Mr. Carter, I will ask you is this the first book that you have, is this the first and only beginning of Genesis of the books of the Consolidated Gas Company?

A. It is.

Q. Or have you got some that start earlier than this?

A. We have nothing other than that, as the start. That is the starting point of the accounts and records of the Consolidated Gas Company.

Q. There are no entries in any other book or records that precede this?

A. None.

Q. And who was it, you said, who made all these entries, pages 1 to 21, were made by whom?

A. Mr. Samuel J. Young.

Q. What position did he hold? 36218

A. He was general bookkeeper of the company at that time.

Q. Of the Consolidated Gas Company?

A. Of the Consolidated Gas Company.

Q. Did he hold any position in any of these other companies prior to the consolidation?

A. Yes.

Q. Which company?

A. The Municipal Gas Lighting Company.

Q. Yours, I think you said, was the New York Gas Light Company?

A. Yes.

Q. When did he die? 36219

A. Over twenty years ago; I am not positive as to the date.

Q. He was dead, then, was he, when the prior suit of the Consolidated Gas Company was brought to have declared unconstitutional this same statute?

A. He was, yes, sir.

Q. Under whose direction did he make these entries, in this Exhibit 467?

A. Under the direction of the officers of the company.

Q. Who?

A. What particular officer?

Q. Well, he must have had some direction?

A. The books of account by the by-laws, rather the custody and control over the books of account of the company are vested by the by-laws in the secretary of the company, the secretary of the company at that time was Mr. H. E. Gawtry, and any directions given to Mr. Young would have been given to him by Mr. Gawtry.

Q. Is he alive?

A. No, he is not alive.

36221 Q. Now, the New York Mutual Gas Light Company was to be in the consolidation, but it backed out, for some reason or other, didn't it?

The Master: The reason is spread on the record half a dozen ways. What is the use paying attention to that. They apparently could not do it because of their charter provisions. It appears clearly and definitely in the record.

Q. Now, on page 1 the figure for mains here of each of the companies, where did those figures come from?

A. They came from the schedules which, in accordance with the consolidation agreement, were filed by

36222 each company.

Q. You don't know anything about whether any of the companies had those mains, or not, of your own personal knowledge, do you?

A. Do you mean had I ever seen them?

Q. Yes.

A. No, I had not.

Q. Now, take the New York Gas Light Company mains, it shows here $950,000. Can you tell me where that came from? Can you produce the paper from which that came?

A. The value placed upon the mains of the New York Gas Light Company will be found in Appendix H of Senate Document 47, which is in evidence.

Q. And it is not $950,000 in that schedule, is it?

A. In that schedule the mains of the New York Company appear, $949,956.45. In other words there was an adjustment of $43.55 to bring them to the even amount of $950,000. You will find that on page 847 of the exhibit.

Q. There is a difference there, isn't there? You take the Manhattan Company, the mains, that came from the same schedule, did it? 36224

A. The mains of the Manhattan Company?

Q. Yes, the difference between the—

A. What amount do you find there?

Q. $1,083,000?

A. On page 828 of the document the mains are given at $1,083,000.

Q. Look on page 825, and you will find there it is $1,083,101.90, won't you?

The Master: Oh, that is wasting time.

A. There was, as I say, in the case of all that property, an adjustment of the odd dollars and cents to an even thousand dollars.

Q. That is, somebody fixed them up to make them even amounts? 36225

A. They did, giving and taking, so as not to substantially affect the aggregate amount, always within a thousand dollars, the adjustments were.

Q. Is that true of meters and services?

A. That was true of all that property, yes.

Q. Plants, real estate?

A. The adjustment in the case of plant in some instances have been more than that.

The Master: But there were adjustments?

The Witness: There were adjustments, yes.

The Master: And that appears in this report here?

The Witness: Yes, sir.

Q. You say all the adjustments appear in the so-called Rowland report?

A. The amount at which the plant was appraised appears in this document.

Q. But the figures shown in this Exhibit 467, do not appear exactly as they do on page 1?

A. They do not appear exactly in the journal as in
36227 the exhibit referred to, the adjustment not being noted, apparently, on the original schedules.

Q. Now, the figures for franchises, what about those?

A. The figures for franchises do not appear in the schedules which form a part of Appendix H, or which constitute Appendix H.

The Master: I don't know about that; look at page 829, it says, "Franchises, $2,239,000."

The Witness: I think in the case of that company, I am wrong in not excepting that company. I do not think any of the other companies have in making up their schedules added their
36228 franchises; they were not supposed to do so.

The Master: But the Manhattan Company did?

The Witness: Yes, they did.

The Master: It is perfectly clear how they figured out the franchises, they figured up all they could for tangible assets and then charged off the balance to franchises. That is all there is to it. Doesn't this record show perfectly clear that the purpose and intent of this consolidation was to issue stock representing the market value of the stock of the constituent companies, they then appraised the plant, meters and services, and they

reached about $30,000,000 and that left about $7,000,000 left over, and they just put that all—

Mr. Chambers: They made it as high as they could, so as to show that the water—try to show that it was not water as much as it was watered.

The Master: There are many bases of argument, from one standpoint or another, but the fact is perfectly clear as to what was done at that time.

The Witness: The evidence does not sustain Mr. Chambers' conclusion there.

The Master: No, but the fact is, as I understand 36230
the testimony, the capitalization of this company represented the market value of the stock of the constituent companies, didn't it?

The Witness: Approximately, yes.

The Master: And the thing that was done was to appraise the plant and fixtures and land, meters and services and all the rest of it?

The Witness: Yes.

The Master: And the balance was credited to franchises?

The Witness: Exactly.

Mr. Ransom: Over and above working capital?

The Master: Yes, over and above working 36231
capital, but that is the way they arrived at the value of franchises.

Q. Where do these franchise amounts come from to go into this exhibit, on page 1, where is their source?

The Master: I won't allow the question, because I have already stated the source.

Q. Well, who did it?

Mr. Chambers: You haven't stated where it came from, you stated how somebody figured it out, but where did this dead man get this?

Mr. Ransom: The basis on which it was figured out appears on the face of the exhibit concerning which the witness is being interrogated.

The Witness: And appears also, I think, in the consolidation agreement.

The Master: Let us have something useful, when we go into cross-examination.

Q. Where did the figure in regard to working capital come from, of the various companies?

The Master: That appears from the other exhibits.

36233 Q. So as to make a total of $1,500,000?

The Master: That appears, I think, from the consolidation agreement.

Mr. Chambers: Or rather $1,303,000.

The Master: It thoroughly appears from the document 47, because I read it here this morning somewhere, from something in evidence. What is the use wasting time on it.

Mr. Chambers: Exception.

Mr. Ransom: It is the consolidation agreement figure less the Mutual's share.

The Master: I know I read it this morning, it must either be in the consolidation agreement, or
36234 document 47, because those are the only two things I read here this morning, otherwise, I would not know it.

Q. Now, these entries that appear on page 3, like amounts due by consumers for gas of the different companies, where did they come from?

A. Those figures are contained in supplementary schedules which were filed for each company in accordance with the consolidation agreement, and they were very carefully audited and checked and proved before being entered in that book.

The Master: Now, you see the difficulty is, that question called for one simple answer. Where did it come from? It came from schedules supplied.

Mr. O'Brien: Of course, the witness is creating his own bill of health, too, carefully done and correctly done and so on.

Q. Are those preserved now, those schedules and audits?

A. Yes.

Q. The company has them?

A. Yes.

36236

Q. In its files?

A. Yes.

Q. They are under your custody?

A. Yes.

Q. In the offices?

A. All the information contained on that page 3 to which you are referring, is contained in those schedules.

Q. And still in existence and in your possession?

A. Yes.

Q. Who made up the schedules, do you know?

A. No, I do not.

The Master: Well, the various companies.

36237

The Witness: Oh, I thought you meant individuals.

Q. Employees of the various companies made them up?

A. Yes. I think some official of each company filed his schedule, and signed it.

Q. Did you check up those with these records on page 3 yourself?

A. No. I may have done so at that time. I do not remember it. I have not done so since.

Q. Now, these sundries here to the New York Gas Light Company, that is your old company. Have you

got the underlying data for those entries on page 4, like real estate, piers, bulkheads, piers and water rights and so forth?

A. All contained in Appendix 8 of Senate Document 47, which is in evidence.

Q. Franchises are not for that company?

A. In the case of the New York Company I feel very sure that it was not stated. 844 or thereabouts. It is not stated in the case of the New York Company.

Q. What are these red ink numbers on the left, like 1, 3, 3, 4, A, are those voucher numbers?

36239 A. No, they are pages in the ledger, indicating where the item was posted.

Q. What are the red ink marks over here on the right of the words, "real estate, bulkheads and so forth," and just to the left of the figures, it says, 1, 1, 1, 2, 2, 7, 15, 23, and so on, are those secret marks of any kind?

A. Nothing secret about it whatever. I won't be sure about that, but I will be very glad to file a memorandum with you, giving that information.

Mr. O'Brien: There is a lot of memoranda coming. We have been having promises of data all the way through, and we have not got it.

36240 Q. Now, the entries on 4 and 5, in regard to the other companies, the Manhattan and Metropolitan and Municipal, why they are just the same as the entries of the New York Gas Light Company for real estate and so on?

A. Yes.

Q. And page 6 seems to be the Knickerbocker and the Harlem, you take meters, meters in stock. That was somebody's estimate, was it?

A. No, it was not an estimate. It is based on the supplementary schedule of that company, the New York Gas Light Company, and the page to which

you refer contains the entries spread out over the accounts, what is shown on page 3, the item in this case being $6,183.65.

Q. Where it says services, value of services, pipe, fittings and so forth?

A. That is the material in stock which was inventoried and included in the supplementary schedule and valued.

Q. Inventoried by the New York Gas Light Company and their schedule filed?

A. Exactly, submitted to an adjustment committee, approved and made the basis of that entry. 36242

Q. Have you got the schedules of all that?

A. Yes, sir.

Q. For each one of the companies?

A. For each of the companies.

Q. You have the same sort of schedules for the other companies, have you?

A. Yes, sir.

By the Master:

Q. Well, all that amounts to, Mr. Carter, is that the Consolidated Gas Company bought certain supplies?

A. That is all it amounts to, your Honor.

Q. Whether they bought them from the constituent companies, or bought them from the people who originally sold them to the constituent companies, does not enter into this situation at all, does it? 36243

A. It does not make a bit of difference.

The Master: What is the use of wasting time on it. Suppose they had had an account, purchased from A, B, C and D, a lot of meters, pipe, fittings, coal and other supplies?

By Mr. Chambers:

Q. There on page 19 there is an item to Thomas F. Rowland $28,795. What was that, do you know?

The Master: It says there balance of a fee for him.

Mr. Chambers: No, it says for amount due him, it don't say fee.

The Master: Well, you and I know what it is.

Mr. Chambers: Well, I don't know.

The Witness: That was a balance due Mr. Rowland under a contract in accordance with which he was making certain additions to the plant of the Harlem Gas Light Company.

30245 Q. So the Master's understanding is not yours, it was not a fee?

The Master: Wasn't it for the appraisal?

The Witness: No, sir.

Q. It was for construction of some work in the Harlem Gas Light Company?

A. Yes, sir.

Q. Well, have you the underlying data for that?

A. Yes.

Q. He did construct holders, didn't he, and other gas property, Rowland?

A. Rowland was a constructor of gas plants, and had constructed a great many of the plants then ex-

30246 isting in New York City.

Q. And he was a stockholder of the Consolidated Gas Company, you knew that, didn't you?

A. I am not aware that he was. I think he was not.

Q. Yes, he was, he swore to that.

A. Did he?

Q. Yes.

Mr. O'Brien: Well, they called him Tommy those days, didn't they? A good Tommy to the company?

The Witness: I never heard him called that

way. He was not the kind of a man you would call Tommy, certainly not the second time.

Mr. Chambers: I think that is all for the present.

The Master: Have you anything, Mr. O'Brien?

Mr. Chambers: Except that we may want to examine the underlying data on some of these entries.

The Master: They will be accessible to you Mr. O'Brien, have you anything?

Mr. O'Brien: I think I better defer until after recess.

36248

The Master: No.

Mr. O'Brien: I will feel better, and I know the Court will.

The Master: Well, I am going to finish now, I kept this stenographer here in order that he might complete this record so as to get his record right.

Mr. O'Brien: It is apt to crowd me.

The Master: Well, you go ahead.

Mr. O'Brien: You see now I will feel under pressure because we are all hungry.

The Master: I am not a bit hungry.

Mr. O'Brien: And the Master wants to get back to that Delmonico lunch. 36249

The Master: Go ahead.

CROSS-EXAMINATION BY MR. O'BRIEN:

Q. How long was Mr. Young in the employ of the company?

A. From the time of the consolidation until his death.

Q. Prior to that time with what company was he employed?

Mr. Ransom: Objected to.

The Master: Question not allowed, already answered.

Q. Where did you keep this book?

A. Where?

Q. Yes.

A. Physically?

Q. Physically?

A. In the company's vaults.

Q. Has it been kept right along with the books of the company up to the time that you last saw the books of the constitutent companies, were they kept together?

A. No, I should say not.

36251 Q. When were they separated?

A. I do not think they were ever together.

Q. Why were they kept separately?

A. Because this was a record of the Consolidated Company in use, frequently referred to, and would therefore be kept where it would be conveniently accessible.

Q. You say it is frequently referred to?

The Master: He said it was frequently referred to.

A. It looks so from the binding on it, and the cover.

Q. Well, the rats down in 15th Street might have done that, might they not, nipped the corners?

36252 A. No, it did not happen that way, Mr. O'Brien.

Mr. O'Brien: Your Honor, I deem this important, they brought this in hugging it close to their breasts this morning, this very book, but we have not yet had accounted for in this case the books of the constituent companies, that were here in the old case, and which they knew would be important.

The Master: Well, you apparently are in no hurry to get your lunch. I am not. Go ahead.

Q. Then I assume from your answer, correctly, do I, that you kept them separate, because you were going to, resorting to and referring to this book, and not to the others?

The Master: Question not allowed, purely repetition.

Mr. O'Brien: Exception.

Q. When you say you knew Mr. Young made up these records here, you don't mean that you stood over him, or that you were at his elbow, or that you were a co-worker with him, do you?

A. I was in the same office. 36254

Q. The same room, you mean?

A. Yes, the same room.

Q. Where are the schedules that you said to Mr. Chambers were still in existence and in your custody?

A. Where are they at the moment?

Q. Yes, in your particular office?

A. No.

Q. Are they in the vault?

A. Well, I am not prepared to say at the present moment where they are. They are in safekeeping and can be produced.

Q. Well, can you say are they in a trust company? 36255

A. No, they are not.

Q. Are they in a safe deposit vault?

A. They are not, they have never been out of the company's possession.

Q. You mean physical possession now when you say that?

A. I mean physical.

Q. Or are you talking about legal possession?

A. Physical.

Q. They were not turned over to any of the representatives of the defendant, were they?

A. Not that I am aware of. I am not aware that they were asked for.

Q. You have not turned over anything that was not specifically put down on paper and described, have you?

The Master: Question not allowed. Not proper cross-examination.

Mr. O'Brien: It is very important on this matter.

The Master: It is not proper cross-examination as to this document offered in evidence on
36257 the testimony of this witness.

Mr. O'Brien: This has come in here now, if your Honor pleases, on a reopening of this case, in the year of our Lord February 11, 1920, it is new matter, and I am not going to pass over it in a three-minute cross-examination after a quarter-past one on this day.

The Master: You can have three hours if you like, of useful cross-examination.

Mr. O'Brien: Well, we ask the Court's permission for some chance to look into it, and you insist on us going ahead with it.

The Master: You have been looking at it, and
36258 Mr. Chambers and Mr. Maltbie have been looking at it.

Q. What data was turned over to Mr. Young to make these inscriptions?

A. The original schedules which appear in Appendix H of Senate Document 47 in evidence.

Q. Now, I want to ask you about those schedules, you say you have got them. Where are they?

A. What schedules are you referring to now? The ones that were in court yesterday—

The Master: The schedules on which these entries are made?

The Witness: There were two sets of schedules, one set is transcribed in this record, and the other is a supplementary set that took care of the materials and supplies.

The Master: It is the supplemental stuff that Mr. O'Brien talks about.

Q. Yes, where are they, where can we get them?

A. At the office of the company.

Q. Who has charge of them?

A. I have charge of them.

Q. Are they in your particular office?

A. No.

36260

Mr. Ransom: I have them in court.

The Master: They are here in court, that ends that.

Mr. Ransom: I have them.

Mr. O'Brien: I ask now that they be produced.

The Master: Produce them, Mr. Ransom, turn them over to Mr. O'Brien.

Mr. Ransom: I hand Mr. O'Brien the supplemental schedules.

Mr. O'Brien: I ask now if counsel for complainant intends to offer these schedules in evidence?

36261

The Master: The inquiry is not pertinent at this time. Proceed with your cross-examination.

Q. Can you say in whose handwriting these schedules are?

A. No. I might be able to recognize one or two of them, but I do not like to trust to my memory for a period of thirty-five years on the question of handwriting.

Mr. Ransom: You know the initials on many of them.

The Witness: I know the initials on them, probably, in some cases.

Mr. O'Brien: I call the Master's attention to the fact that these schedules were not offered in evidence and not produced when the book itself was put in here.

The Master: You do not have to call my attention to it. The record shows what was done.

Q. Have you, Mr. Carter, or has anybody for the company now with the company, ever compared these schedules with the notations made in Complainant's Exhibit 467?

Mr. Ransom: Objected to. Immaterial.

36263 The Master: Overruled.

Mr. Ransom: Exception.

A. I have no recollection in that regard.

Q. You do not remember that anybody has?

A. So far as I am personally concerned. Somebody else did, undoubtedly.

Q. Did you, before you prepared yourself to say that these were correct entries, did you make any comparison at any time between these schedules and the entries made on the book, to determine whether they conformed with them?

A. I have at times had occasion to do so, not specially for this particular occasion.

36264 Q. I have here a paper marked "F. J. I. G.," and ask you what that refers to, what plant?

A. Harlem Gas Light Company.

Q. Is that known as the Harlem Company?

A. What do you mean the Harlem Company? It is the Harlem Gas Light Company.

Q. Is that the same as the Harlem Company? A. Yes.

Q. Or is the Harlem Company something different?

A. The Harlem Company and the Harlem Gas Light Company, I should say were identical. I know of no other company than the Harlem Gas Light

Company, and I should say it might be called the Harlem Company.

Q. There is a reference on page 3 to properties in a table here of the Harlem Company. Would you assume that to be the same company as the Harlem Gas Light Company?

A. Yes.

Q. Do you know in whose handwriting this schedule of the Harlem Gas Light Company is?

A. I would not be sure about it. I think it is in the handwriting of a Mr. Moss.

Q. Do you know who made these inscriptions on 36266
the side, in penciled writing?

A. May I look at it?

Q. Yes (handing paper)?

A. It looks like my father's handwriting. His initial appears at the end of the document there, I think, "S. C."—Samuel Carter.

Q. Well, do you think these red ink inscriptions on the margin were made by him?

A. No. Those are dated 1901. One of them, for example, October, 1901, says, "Taken down." Apparently it was the practice at some time to go back and note the removal or withdrawal of property itemized in this schedule on the original schedule. I 36267
know that it was not done continuously.

Q. Well, would you assume—

A. I think I know that handwriting, though, if you permit me. It is the handwriting of one of the clerks of the general office, a man by the name of Wesslink, now dead.

Q. Is Mr. Moss dead, the man in whose handwriting you say this—you think this schedule was made, is he dead?

A. Yes.

Q. Or missing?

The Master: He has answered it now, he is dead.

Mr. O'Brien: Well, I want to get his definite statement.

The Master: He answered it in his previous answer. Next question.

Q. When did he die?

The Master: Not allowed, immaterial.

Q. Then would you take these red ink inscriptions here, indicating the taking down or eliminating of properties, as correct statements of facts?

36269 Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Q. So far as they go?

The Master: Objection sustained, I said.

Mr. O'Brien: Exception. Your Honor, we have here the record and it indicates three gas holders taken out 1901; meter house taken out, station meter transferred, governor houses, two of them taken down in 1901; boiler house and boiler and something else I cannot decipher, and it would seem perfectly proper for me to ask the witness as to whether these statements here are correct statements and whether they are relied upon by the company for data, because they are in

36276 this record that he says is the basis of the entries in the book which you received in evidence.

The Master: Yes, but not the red ink.

Mr. O'Brien: There is a lot of other information here as to the taking down of properties, transferring of property to Inwood, and I think it would be perfectly proper and helpful to the Court to find out how far the company has been relying upon this paper.

The Master: I have made my ruling.

Mr. O'Brien: If they don't rely upon it as to the red ink inscriptions, if they do not rely on it as to certain other inscriptions here, then it certainly goes to the question as to the reliability of this paper.

The Master: I have made my ruling.

Mr. O'Brien: Exception. I would like an opportunity to aid my cross-examination and incidently to expedite this trial, to make comparisons between these schedules which have just been handed to me at my request by the complainant's counsel, with the entries made in this book, 36272
and if I take it up—take the time to do it, while I am questioning the witness, the examination will be unnecessarily prolonged.

The Master: Well, if I adjourn now, it is twenty minutes past one, for that purpose, until half-past two, will you have time to get your lunch and make that examination?

Mr. O'Brien: I will do everything I can, I will take about thirty-five minutes for my lunch and devote the rest of the time to that examination.

The Master: Well, then, we will adjourn until half-past two, with the understanding that you will get your lunch and come back as soon as 36273
you can and then check these things up.

Recess.

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Afternoon session.

ROBERT A. CARTER, resumed.

BY MR. O'BRIEN:

Q. Mr. Carter, were these schedules that we were speaking about before recess turned over to Mr. Row-

land when he took up the work of making his appraisal?

A. Are you referring now to the supplementary schedules that appear in detail on page 3?

The Master: Yes, that is what we are talking about, supplementary schedules.

Mr. Ransom: I think the record ought to show that I handed Mr. O'Brien this morning not only supplemental schedules under that Article 14 of the consolidation agreement, but also certain of the Rowland schedules, which are schedules not
3627 under that article but schedules of property called for by Article 6, I think it is.

The Master: It is the property referred to in Appendix H here, I assume.

The Witness: Yes, sir.

The Master: In other words, Mr. O'Brien has two kinds of schedules.

Mr. Ransom: Two kinds of schedules.

The Master: Then you will have to say what schedule you are referring to, Mr. O'Brien.

Mr. Ransom: Page 3 of the exhibit only refers to a supplemental schedule.

Mr. O'Brien: All I can see is that I have got
3627a these 57 varieties of schedules here, that they do not bear on their face a statement as to whether they are supplementary or whether they are originals. This may be but the context of the schedule would indicate whether it is covered by the tabulation on page 3 of the journal.

The Master: When you refer to a paper hand it to Mr. Carter so that he will know what you are talking about.

Mr. O'Brien: Before we go to that I would like to ask Mr. Mrich if he handed back to me all of the papers that I handed to him before recess.

(Mr. Mrich responded in the affirmative.)

Mr. O'Brien: You had looked it over in the meantime?

Mr. Ransom: Objected to as immaterial.

The Master: That ends it, Mr. O'Brien. You got what you want.

Mr. O'Brien: The only question is that they came back rearranged and were separated. I had twenty-one separate papers and when they came back they were rearranged. I want someone's statement that they are the same.

The Master: All right, you have got that. 36278

Q. Now will you answer that question, Mr. Carter?

The Master: Mr. Carter will have to look at the paper to which you refer before he can answer the question.

(Mr. O'Brien hands the witness paper.)

By the Master:

Q. Was that schedule submitted to Mr. Rowland before he made his report?

A. This schedule has nothing to do with Mr. Rowland's report. It has nothing to do with Appendix H.

Q. Is that a supplementary schedule? 36279

A. This is a supplementary schedule.

The Master: Mark that as an exhibit for identification.

Marked Defendants' Exhibit AA-372 for identification.

The Master: I want the record to be clear that Defendants' Exhibit AA-372 for identification is what is known as a supplementary schedule.

The Witness: Yes, sir.

By Mr. O'Brien:

Q. That relative to the Harlem Gas Light Company?

36280 Robert A. Carter, Cross.

A. Yes, sir.

Q. I hand you another paper which you have previously stated to be a schedule in connection with the Harlem Company, and ask you if that was handed to Mr. Rowland before he made his appraisal, if you know (handing witness)?

A. I do not know, but I should think not. I should say not.

The Master: Mark that for identification.

Marked Defendants' Exhibit AA-373 for identification.

36281 By the Master:

Q. Mr. Carter, is Defendants' Exhibit AA-373 a supplementary schedule?

A. No, sir.

Q. Or a main schedule?

A. It is a main schedule.

Mr. O'Brien: By that you do not refer to mains?

The Master: No. The principal schedule.

Mr. Ransom: Under Article 7.

The Master: Under Article 7 or 8 of the consolidation agreement.

The Witness: Included in Appendix H.

36282 By Mr. O'Brien:

Q. When did you first see that, Mr. Carter?

The Master: Meaning what?

Mr. O'Brien: This schedule (indicating).

The Master: What number?

Mr. Ransom: Objected to.

Mr. O'Brien: Defendants' Exhibit AA-373 for identification.

Mr. Ransom: Objected to as immaterial and not cross-examination.

The Master: I will allow it.

Mr. Ransom: Exception.

A. Thirty-five years ago or thereabouts.

Q. Was it prepared before Mr. Rowland made his appraisal?

A. I don't know.

Q. What do you think?

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: I will sustain that objection. He says he don't know. If he thought about it it would only be a guess, I take it.

Mr. O'Brien: Exception.

Q. Did you ever compare this with Mr. Rowland's appraisal? 36284

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

Mr. Ransom: Exception.

A. Yes, I have. May I look at it again?

Q. Yes (handing witness).

A. Oh, yes, I have compared that with the Document 47.

Q. Can't you recall whether these schedules that you have here, of which this is one, that are principal schedules, were all turned over to Mr. Rowland when he began his appraisal?

A. In that shape, with amounts put in them? 36285

Q. This shape, these papers?

A. No, I should say decidedly not. He made the appraisal himself; he was not handed figures.

Q. Are these the same figures that Mr. Rowland used for the properties that are mentioned there?

A. I am not prepared to say anything about Mr. Rowland in connection with that document, but I know that that document appears in Appendix H of Schedule 47 as it is there. It is a copy—copied from that.

Q. Can't you recall now whether you had these various schedules when the companies were consoli-

dated turned over to you? Or did they come to you later?

A. They came into the possession of the Consolidated Company upon its organization.

Q. And Mr. Rowland made his appraisal afterwards?

A. No, indeed, he did not. He made it before.

Q. Could you state to the Court how far these disagree with Mr. Rowland's figures?

Mr. Ransom: Objected to as incompetent. The documents speak for themselves and there is
36287 nothing to indicate any disagreement.

The Master: Objection sustained. It would appear from Appendix H, found in Senate Document 47, that Mr. Rowland made his appraisal in August of 1884.

Mr. O'Brien: Exception.

Mr. Ransom: Some of them are in September—August and September.

The Master: August and September, 1884.

Mr. Ransom: The latest date I recollect is September 8, 1884.

The Master: Yes, I see September 1st.

Q. Which figures do you think more correctly rep-
36288 resent the then value of this property, these schedules or the Rowland appraisal?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do these figures set forth in these schedules—I am speaking particularly of Defendants' Exhibit AA-373 for identification—represent the reproduction costs as of 1884 of the properties therein set forth, or do they represent the original costs of the property, if you know?

Mr. Ransom: Objected to as incompetent, not proper cross-examination. The papers speak for themselves.

The Master: Objection sustained.

Mr. O'Brien: Exception. Your Honor, may I ask if you are making that ruling on the theory that you advanced, that you take the property of the company so far as its valuation goes in this case, as represented by the stock issued in 1884?

The Master: You will have to draw your own inferences, Mr. O'Brien.

Q. Did anybody in connection with the Consolidated Company when they started business check this up with the properties that were turned over by the Harlem Company, to see whether you got that property? 36290

A. Undoubtedly. Those figures that you have there were the basis of the consolidation agreement, in so far as the Harlem Company was concerned, and represent the cost to the Consolidated Company of that property scheduled there.

By the Master:

Q. That is not Mr. O'Brien's question at all. Was any checking done to see that you got the property for which you were paying? 36291

A. That was undoubtedly the business of the consolidation committee, to see that that was done.

Q. Do you know anything about it?

A. I do not know anything more than what the testimony in the case indicates, your Honor.

By Mr. O'Brien:

Q. What testimony do you refer to?

A. The testimony of witnesses that appeared before the Senate Committee in 1886—1885 and 1886.

Mr. Ransom: Shown in the Senate report?

The Witness: Shown in the Senate Report, Document 47.

36292

Q. Getting away from that, you are not depending upon something that was said to the Senate Committee for the information; you come in to verify this book?

Mr. Ransom: Objected to, if that is a question.

Q. (Continued.) Have you not?

The Master: I will sustain the objection.

Mr. O'Brien: Exception.

Q. Will you name the man, if there was a man, in the employ of the Consolidated Company who went over these properties of the Harlem Company to check them up and see whether they were turned over to the Consolidated Gas Company?

36293

A. I cannot name the man who did it.

Q. Do you know that a man did it?

A. Oh, yes, there were appraisers engaged on the inventorying and appraisal of this property prior to the making of the consolidation agreement.

The Master: You are not answering Mr. O'Brien's question, Mr. Carter. Mr. O'Brien wants to know, assuming that the values stated are correct, how he can check up the fact that the properties of the value claimed actually came into the possession of the Consolidated. When this company was organized was there anybody

36294

that you now presently recall and identify, in the Consolidated Company, who went over these lists and went over these properties and checked off the various items to see that they were all there.

Mr. Ransom: I object to the question. That appears from the books.

The Master: No.

Mr. Ransom: The additions and withdrawals since that time have been put in evidence by the defendants.

The Master: Objection overruled. I think Mr.

O'Brien is entitled to an answer to that question.

Mr. Ransom: Exception.

The Witness: I cannot name the individual, your Honor, or the individuals, who did that work.

Q. Do you know of your own knowledge that they did do it?

A. I am very certain that all the properties, all the inventories, were checked.

Q. Do you know whether it was assigned to some particular branch of the office to check it? 36296

A. The office of what company?

Q. The Consolidated Company.

A. There was not any such company at that time. By the Master:

Q. No, I mean on organization there was.

A. Subsequently?

Q. Yes.

A. Oh, no.

Q. On November 10th, as I recall it, Mr. Carter, 1884, you had your first meeting, organization meeting of the Consolidated Company, did you not—or was it November 10th or 11th, 1884?

A. November 10th or 11th, I think. 36297

Q. That company then came into existence, did it not?

A. Yes, sir.

Q. It issued certain stock for certain property; am I correct about that?

A. Yes, sir.

Q. There is not any question but what the stock was issued, is there?

A. There is not.

Q. What Mr. O'Brien wants to know is, did you get the property that you paid for?

A. I don't think they would have waited until then, your Honor, to find out whether they were getting it or not; they found out before then.

Q. How could they if they were only organized in November?

A. The Consolidated could not, but the people who were officers of the Consolidated Company had been, some of them, identified with the Consolidation Committee and with the constituent companies, and they were mighty careful to see that they got what they issued stock for.

36,299 By Mr. O'Brien:

Q. Now, you are talking about what stock?

A. Issued stock of the Consolidated Gas Company for and in payment for this property.

Q. Do you know that of your own knowledge or are you just assuming it?

A. No, I know that it was done.

Q. Do you know that they went over the property and checked it up? Go ahead and answer that question first.

Mr. Ransom: Objected to as fully covered.

The Master: No, I will allow it.

Mr. Ransom: Exception.

36,300 A. The property was inventoried and was checked up.

Q. Are you assuming that, Mr. Carter—

A. No, I am not assuming it, no.

Q. (Continued.) Just from your memory of the way they did business?

A. I am not assuming it.

Q. Can you state just the *modus operandi* they adopted, this Organization Committee or Consolidation Committee?

A. No.

Q. Do you know any men that you think were assigned to that work?

A. Mr. Rowland was assigned to it, an engineer by the name of Palmer did some work of that character, several assistants of Mr. Rowland were engaged upon the work. But that is all I know about it; it was their business to check these inventories.

Q. And you assume that they did it?

A. And I assume that they did it.

Q. Beyond that you do not know anything further?

A. I did not attend—

The Master: I think the subject is fully covered, Mr. O'Brien. It is perfectly clear to me that back thirty-five years ago all that Mr. Carter recalls is that he has a firm and distinct impression this company did not issue stock for something it did not believe it was getting. That is all he knows about it. 36302

Q. Would you say how long prior to the consolidation that work was done, if it was done?

The Master: I won't allow it. I think the subject is sufficiently covered; I do not think it would be at all useful.

Q. Would you say that the Consolidated after they started business went over the matter to see what they had on their premises? 36303

A. I would not be sure about that.

Q. Is there any place in the files of the Consolidated Gas Company a certification by anybody that they inventoried this property and they found everything there that was set up in these schedules?

Mr. Ransom: I object to the question on the ground that the consolidation agreement provided that certain schedules made up in a certain way should be turned over to the Consolidated Company.

36304 Robert A. Carter, Cross.

The Master: But suppose the property was not turned over? Schedules do not make property.

Mr. Ransom: The deeds are in evidence.

The Master: I will allow the question. We are talking about all this variety of property.

Mr. Ransom: Exception.

A. We have had occasion to check that in two or three instances, where plants have gone entirely, your Honor. The 111th Street plant, when the property was taken by the City for Little Italy Park, was prac-
36305 tically wiped out, and the only basis we had for writing it off the books was the original schedules—that is, to get the amount to write off, at the value at which that property was taken over.

Q. Do you mean these schedules that you have here, brought today?

A. Yes, of course, those are what I mean.

Q. And you relied upon them?

A. We relied upon them for the amount invested by the company in these properties that were dismantled by reason of the City condemning the company's property and necessitating the writing off of that property.

36306 Q. Now will you come back and answer the question. You gave me some information that I did not ask for at that time. My question was whether there was any certificate of any man connected with the Consolidated Gas Company, made after they opened up their books, that he had gone over or they had gone over this property, checked it up and found that it was there?

A. I am not able to state that that was done, Mr. O'Brien.

The Master: Is it your impression that your company believed it was dealing with honest men

36307

and that when they said the property was there and certified it in the schedules the company assumed that was so?

Mr. O'Brien: I will object to the question, because you are assuming that it is certified. There is no name in that, there is no certification on it, no date on it.

The Master: I will modify my question, then. When they presented schedules giving you the list of the properties you assumed they were telling the truth?

The Witness: There is no doubt whatever, your Honor, that these gentlemen had confidence in 36308
each other. At the same time, as a precaution against error or omission, they would have checked these over. Not as evidence of bad faith, but simply for the discovery of inadvertences in the making of an inventory. The best expert that ever lived will make mistakes in inventorying property. He is more apt to leave out things, however, than he is to include anything that is not there.

The Master: Mr. O'Brien, I would not spend any more time on that if I were you. I think the situation is as clear as you can make it. These companies were dealing with each other, they had 36309
these schedules prepared, there probably was some check on it, but you cannot locate any individual, living or dead, who checked it up, if they did.

Mr. Ransom: Each company was anxious to see that the other did not get relatively too much stock for the property.

Mr. O'Brien: It is pretty hard to send a wireless from your mind, Judge Ransom, back to those days, as to what was in their minds.

The Master: It does not help us any.

Mr. O'Brien: If the witness will come out and say frankly that he assumed from all he knew at that time that everything was correctly checked up and minutely, that would be another thing.

The Master: He has said that, but he has said it several times in different ways, as I am trying to tell you.

Mr. Ransom: It was described in Senate Document 47, just how they checked and kept down each other.

Mr. O'Brien: You are hugging that Senate
36311 Document 47 just as you did the uniform system of accounts.

The Master: Yes, and you will be hugging it, too, when you come to argue. It will be a question who hugs it the closest.

Q. Mr. Carter, just to hurry through this, will you just take one of these schedules, this so-called inventory of the Harlem Gas Light Company which I see dated November 10, 1884, Defendants' Exhibit for identification AA-372, and tell me whether those figures have been incorporated in page 3 of this opening journal of the Consolidated Gas Company?

A. Yes. I point to page 3, Mr. O'Brien, and to the
36312 column headed "Harlem Gas Light Company," in which the various items contained in the supplementary schedules are set forth, and draw your attention to the fact that the total stated there is $162,126.24, and that the aggregate amount of the schedule which you hand me, Defendants' Exhibit AA-372 for identification, shows the total to be $162,126.24.

Q. And who was this man Moss?

A. Mr. Moss was—

The Master: You have already told us who Mr. Moss was.

The Witness: He was connected with the Har-

lem Company. I think he was president of the Harlem Company.

Q. I thought you said Morse before?

A. Moss—M-o-s-s.

Q. Is Mr. Moss still alive?

The Master: We have had that.

Mr. Ransom: Mr. O'Brien is referring to the men who certified that.

The Master: I know what he is referring to.

Q. Mr. Carter, what you have said about this schedule of the Harlem Company applies to the schedules of all the other companies? 36314

A. Yes.

Q. The constituent companies?

A. Yes, sir.

Q. Their supplemental schedules?

A. Yes, sir.

Q. Are they the same as they are in the book here?

A. Yes, sir.

Q. And they represented then conditions as of what date?

A. November 10th.

Q. Oh, but these were made back in the early part of 1884, were they not?

A. Those schedules, the supplementary schedules you are talking about, are you not, Mr. O'Brien? 36315

Q. Yes.

A. They were made as of November 10th.

The Master: I thought you said that that was dated November 10th.

Mr. Chambers: This is November 11th.

The Witness: Or November 11th.

The Master: I thought he said this was dated November 10th?

Mr. O'Brien: Yes, I guess you are right about that.

36316 Robert A. Carter, Cross.

The Master: The others were dated in August or September. This is dated November 10, 1884. I am talking of Defendants' Exhibit AA-372 for identification.

Mr. O'Brien: Yes. I mean this one here is June 1st (indicating).

The Master: My recollection is, Mr. Chambers, that there was a meeting on the 10th, followed by a meeting on the 11th, that some organization work was done on the 10th, and then there was some more of it disposed of on the 11th. That
36317 is my recollection of it.

Mr. Ransom: The certificate was filed on the 10th.

Q. Do you know in whose handwriting the Knickerbocker Gas Light supplementary schedule was made (handing witness)? A. That is Mr. Young's handwriting.

Q. Was he any relation to Peter Young, the chief engineer at Astoria?

A. No.

Mr. Ransom: I do not think that the record ought to indicate that Peter Young was ever chief engineer at Astoria.

36318 Mr. O'Brien: Well, change it. Ask him a question: we will not quibble over it.

The Master: Let it go now.

Q. All of these schedules, these supplemental schedules, you believe to have been made in November, showing materials on hand?

A. Yes, sir, as of November 10th.

Q. Then they are matters that the Consolidation Committee did not go into?

A. Only to direct or to provide in the agreement that such schedules as you have in your hand should be filed.

Q. When you referred before to your belief that they must have checked it up, the properties that were to be transferred from the constituent companies, you had in mind the schedules that are taken over on the first page of the journal, did you not?

A. I don't think there is any property alluded to on the first page of the journal. I mean in any detail.

Q. Don't you see mains five million in total, giving the amount for each company, the meters for each company?

A. Oh, yes.

36320

Q. Services, plant—that is what you referred to, is it not?

A. As having been inventoried?

Q. Made by the Consolidation Committee.

A. Yes. Not only that property, however, but the property covered by the supplementary schedules.

Q. Do you know on what date this book was opened?

A. Subsequently to November 11th—immediately after November 11th.

Q. How do you explain their not putting a date in here? Isn't it the part of good accountancy to have a date always for entries?

36321

A. No, not in a journal. The journal is supposed to record the month's transactions, and if it carries any date it would carry the date of the last day of the month.

Q. It is sort of a garbage can to take up all of the odds and ends of the month?

Mr. Ransom: Objected to.

The Master: Objection sustained.

A. It is indispensable—

The Master: I sustained the objection, Mr. Carter.

Q. Do you suppose the company, the Consolidated Company, just assumed from the receipt of this statement of the Knickerbocker Gas Light Company, signed by H. E. Gawtry, that the material and supplies were all there?

A. Some check was put upon it; I do not know how full it was. It dealt with small supplies and materials and one thing and another.

Mr. O'Brien: I will ask that be marked for identification—the supplemental schedule of supplies of the Knickerbocker Gas Light Company.

36323 Marked Defendants' Exhibit AA-374 for identification.

Mr. Ransom: By "Mr. Gawtry," you mean the secretary of the Consolidated Gas Company at that time?

Mr. O'Brien: I suppose it was Harrison E.

The Witness: Harrison E. Gawtry. I presume he signed as an officer of the company whose schedule you have before you.

Q. Is this your father's initial under Mr. Gawtry's signature (indicating)?

A. Yes, sir.

Q. Do you recall who made up this schedule of the Municipal Gas Light Company, whose handwriting that is (handing witness)?

36324

A. Yes, sir, that is the handwriting of Mr. Young.

Q. The same Young?

A. Same Young.

Q. Was he in the employ of two or three of these gas companies?

A. No, he was in the employ of the Municipal Company, which was very closely affiliated with the Knickerbocker Company, and in fact, had at the time of consolidation acquired all of the stock of the Knickerbocker Company.

Q. Can you recall of your own personal knowledge whether anybody went over this list of material on hand, beginning with fifty pounds of Albany grease and so on, to find out whether this material was turned over to the company, the Consolidated Company?

Mr. Ransom: Objected to.

The Master: We have been all over that. Objection sustained as already fully covered.

Mr. O'Brien: Exception.

Q. What you said about other schedules, supplemental schedules covering material on hand of the 36326
constituent companies, you would say as to all the rest?

A. Yes.

Q. That are in the file of schedules you have handed me?

A. Yes.

Q. In other words, you assumed that they were checked up?

A. Yes.

Q. In these principal schedules do the prices applied to the units represent somebody's estimate of their cost or value?

Mr. Ransom: Objected to as fully covered. 36327

The Master: Yes, sustained.

Mr. O'Brien: I think your Honor would like to have it definitely understood what prices they set up here at this time.

The Master: No, I do not care.

Mr. O'Brien: Your position, then, is that the Consolidated had to give them stock or something for it, and you do not care what they paid for it or what it was listed at?

The Master: I have refused to get into a discussion with you, Mr. O'Brien, because I know

it won't land us anywhere. I am ruling on the questions as they appear.

Mr. O'Brien: Exception.

Q. Do you know whether the costs or values as set up in the principal schedules referred to on page 1 of this Exhibit 467 include overheads?

Mr. Ransom: Objected to on the grounds previously stated.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Do you know whether they included somebody's
363,29 estimate of overheads?

Mr. Ransom: Objected to on the same grounds.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. I call your attention to this principal schedule of the Metropolitan Gas Light Company, a bill there of November 11th, 1884, "To services laid from date of Inventory to November 11th," and ask you whether in that first item you can determine the length of the services that are charged up at $700?

Mr. Ransom: Objected to.

The Master: Sustained.

363,30 A. This is not a principal schedule.

Q. Is it a supplemental schedule?

A. Oh, excuse me, yes, this is a supplemental schedule.

Q. I will just strike out principal and we will ask you the same question as to the supplemental schedule.

Mr. Ransom: The question is objected to.

The Master: Same ruling.

Mr. Chambers: He wanted to answer that.

The Master: What?

Mr. Chambers: Mr. Carter seemed to be desirous of answering that.

The Master: I am not interested in Mr. Carter's desires except, perhaps, to the extent that I must consider his desire to have a favorable report. Otherwise I am not interested in it.

Mr. O'Brien: Your Honor, I want to call your attention to the way that is set up.

Q. What does that "10" mean—10 a foot or 10 a service?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. In the next line, "1 1/4 inch," does that "11" mean $11 a foot or a yard, or $11 a service, or what? 36332

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. O'Brien: I want to show, your Honor, how absolutely unreliable this is.

The Master: All right, ask your questions.

Mr. O'Brien: Exception to all your rulings.

Q. Does this "15" opposite the inch and a half, indicate $15 a service?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Is there anything on that bill to indicate the length of the service? 36333

The Master: Same ruling: the paper speaks for itself.

Mr. O'Brien: Exception. There is nothing there, your Honor.

The Master: Then you do not have to have Mr. Carter say it is not.

Mr. O'Brien: This is not in the record.

The Master: You can put them in.

Mr. O'Brien: I want to show you the unreliability of it.

The Master: I am not going to rely on them.

36334 Robert A. Carter, Cross.

Q. I call your attention to the next bill initialed by your honored father, dated November 11, 1884, and ask you if 80 cents opposite the "four-inch" represents the cost of laying a four-inch main at that time?

Mr. Ransom: Same objection.

The Master: Same ruling, sustained.

Mr. O'Brien: Exception.

Q. And whether $1.20 represented at that time the cost of laying a foot of six-inch main?

Mr. Ransom: Same objection.

36335 The Master: Same ruling.

Mr. O'Brien: Exception.

Q. And whether $1.75 represented at that time the cost of laying an eight-inch main?

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. And whether $2 represented the cost of laying a ten-inch main?

The Master: Same ruling.

Mr. O'Brien: Exception.

The Master: I do not think you had better ask any more questions of that kind.

Mr. O'Brien: I will close with this one here.

The Master: No, we have had enough.

36336 Q. Mr. Carter, were those mains, if you know, laid under paving?

Mr. Ransom: Objected to as immaterial.

The Master: Sustained.

Mr. O'Brien: Exception

Q. Mr. Carter, will you explain, if you can, why they have inscribed on page 3 for the Metropolitan Company a total in the column of 173,780, whereas in the schedule it is 43,680 (handing witness)?

A. The summary which you have shown me, Mr. O'Brien, is a summary of only a portion of these

schedules. Taken altogether they aggregate the amount shown on page 3.

Q. Do you find that figure of 43,680 any place in there? It is the summary of the last page, is it not, recapitulation?

A. No, it is not.

Q. No, but the paper I handed you, the last page of the schedule is entitled "Recapitulation" and gives the variouse amounts drawn in and a total made of $43,000.

Mr. Ransom: There are various documents following that. 36338

The Master: Let Mr. Carter answer.

A. That refers to only a portion of it.

Q. Do you know where the schedule is that covers the rest of it?

A. They are all here. You have taken only a part of them.

Q. See if there is any other recapitulation?

Mr. Ransom: I object to the question. He says it is a recapitulation of a part and the other items are all there together.

A. You have selected a grouping of certain figures that represents but a part of the schedule, supplementary schedule of the Metropolitan Gas Light Company. 36339

The Master: Have you got an item there of $8,460.75, "materials on hand at works foot of 42nd Street"?

Mr. Ransom: I am under the impression it is the item of consumers' bills that is missing there.

The Witness: No, there is nothing missing here, but that particular item does not appear, your Honor, as a separate item.

By the Master:

Q. Have you got street department appliances and tools as a separate item?

A. They have got tools and implements. I do not believe that is the one $1,870.43. If you will begin at the first bill, your Honor, I think perhaps I could call them down and you would be able to identify them there without much trouble.

Q. What is your first one?

A. The first item is $3,749.

Q. Yes.

A. That is, the services laid since June 1st. Then follows meters in stock, $10,301.41.

Q. No, meters in stock, $10,301.41?

36341 A. Yes.

Q. Yes, I have got that.

A. Gas making material, the first item of which is coal, $83,057.57.

Q. Yes.

A. Naptha, $1,949.24.

Q. Yes.

A. Lime, $468.

Q. Yes.

A. Then there is an item of gas on hand in holders of $1,000.

Q. Yes.

A. Then pipe and castings amounting to

36342 $40,683.67.

Q. That is the item that Mr. O'Brien had, $43,680.82?

A. Not exactly that; it is $40,683.67.

Mr. O'Brien: There is a difference of $3,000 on that.

Q. What do you call it, pipes and fittings?

A. Pipes and castings. I may be able to reconcile that later.

Q. What else have you got?

A. Service pipe and fittings, $1,197.34.

Q. They have been segregated out of this at some point?

36343

A. There are a number there that have been grouped on one sheet.

Q. What was that last, $40,273.71?

A. No, sir, $40,683.67.

Q. I do not locate that.

Mr. O'Brien: There are a lot of things on that page 3 that are not in this schedule.

A. Have you a $43,000 item there?

Q. Yes.

A. I am going to foot these up. I have four items here aggregating $40,680.78.

The Master: It is quite apparent that that account coincides with these Metropolitan schedules, if you check them off.

36344

Mr O'Brien: Oh, no, it does not, your Honor, I beg your pardon.

The Master: I make the statement on the record to that effect.

Mr. O'Brien: I am going to show you the book here. He has not read all the items in the book, he has only gone half-way down.

The Master: Well, we will not waste any more time on that, Mr. Carter, take your seat.

Mr. O'Brien: Your Honor, I call your attention to the fact that at this time we have reached the item of $40,683.67, which is the last item on that schedule.

36345

The Master: No, it is not the last item on that schedule.

The Witness: No, not by any means.

The Master: It is not the last item on that schedule.

Mr. O'Brien: Well, it is on the last page.

The Master: It is not on the last page.

Mr O'Brien: Well, it speaks for itself.

The Master: There are four pages after that—or five.

36346

The Witness: Five.

Mr. Chambers: Little pages. It is on the last long page.

Mr. O'Brien: The bills added in, you mean?

The Master: Yes, they are all part of the schedule, apparently. I am not going to waste any more time with it. I am not going to check it up. Next question.

The Witness: It will all be checked to a penny.

Mr. O'Brien: I am going to move that that comment of Mr. Carter, that it is all checked to the penny, be stricken from the record.

36347 The Master: Mr. Carter's statement that they were all checked to the penny remains on the record.

Mr. Chambers: Exception.

Mr. O'Brien: Exception, of course, to the ruling just made. I call your Honor's attention to the fact that on page 3 the witness read seven items, the last of which was $40,683.67 under the column entitled "Metropolitan Company." The others following in the same column are of these amounts: $1,197.34—

The Master: Let me have that schedule before you read any further. How much?

36348 Mr. O'Brien: $1,197.34.

The Master: What is that for?

Mr. O'Brien: Service pipes and fittings, $817.24, $662.33, $11,942.91, $99.65, $1,200 $493.47, $2,013.54, $96.96, $224.57, $10,738.10, $1,876.43—the total being, of the whole column, $173,780.43.

The Master: What about it?

Mr. O'Brien: Those are the items up to the last questions put by you to Mr. Carter that did not appear upon the schedule.

36349

The Master: But they do. I have in my hand now the voucher for $1,200, the voucher for $493.47, one for $96.96, the one for $224.57, being the last four sheets of this schedule. Do not let us waste any more time on it.

Mr. O'Brien: That does not cover the items I read off, your Honor.

The Master: We will not have any more of it.

Mr. O'Brien: You have $1,200, $493.47, $96.96 and $224.57, but you said nothing about $11,942.91 and you said nothing about $10,738.10.

36350

The Master: The Master states they are all in that bunch of papers in one form or another.

Mr. O'Brien: Will your Honor permit me to defer this examination until the next session and go over these matters?

The Master: No, it is a wasteful cross-examination; I won't permit it.

Mr. O'Brien: I disagree with your Honor's view of this matter and take an exception to your ruling.

The Master: That is the way to handle it.

Mr. O'Brien: I ask that this be marked for identification, this schedule entitled "Metropolitan."

36351

The Master: Mark it for identification—consisting of a large number of sheets.

Marked Defendants' Exhibit AA-375 for identification.

The Witness: That is a resume of the same schedule in different form, Mr. O'Brien, that you now have in your hand.

Mr. Goetz: A part of it.

The Witness: A part of it. That is a resume of the figures appearing in the detailed statements that you have been reading from.

The Master: This resume is part of Defendants' Exhibit AA-375 for identification?

The Witness: Yes.

The Master: Attach it to Exhibit AA-375 for identification.

By Mr. O'Brien:

Q. Is Mr. Zollikoffer still living, Mr. Carter?

A. Do you refer to father or son?

Q. Mr. O. Zollikoffer?

A. He is dead.

Q. Mr. Carter, could you tell me why or explain
36353 the difference between this total here on page 1 of $11,040,000 set opposite the Manhattan Company, and this $1,700,294 above Mr. Rowland's certification (handing witness)? I assume the difference would be made up of this $2,329,000 of franchises?

A. Yes, that would enter into it.

Q. But the other difference, I would like to have you explain.

A. You have another schedule, have you not, of the Manhattan Gas Light Company, or is this the only one?

Q. Here is the supplemental schedule (handing witness).

36354 A. Have you not another one that looks like this—

Q. Yes, the Manhattan Gas Light Company.

A. Let me have the one for the 18th Street station (handing paper).

The Master: That makes the difference does it not?

The Witness: Taking these two together it does, it gives the $3,623,000 which you find is the item of plant on that schedule.

The Master: The fact is, Mr. O'Brien, you had a schedule applicable to one of them and not both of them.

Q. What schedule have you here to cover the items appearing on page 1 opposite Manhattan Company of $1,083,000 for mains, $367,000 for meters, $35,000 for services, $425,000 for piers, bulkheads and water rights, $175,000 for office buildings, $20,000 for office furniture, $5,000 for laboratory?

A. The third schedule belonging to the set of the Manhattan Company. I refer you to page 1 of this schedule entitled "Mains, Meters, Services, Real Estate, etc.," $1,083,101.90, which was included in the appraisal at $1,083,000, unless I am mistaken. The rest of it appears—here are the meters on page 2 of 36356
this schedule, $367,000, $100,000 being taken off to produce the even amount. Services, $350,000, itemized here at $349,779.

Mr. Goetz: Mr. Carter, did you say $100,000 taken off?

The Witness: $100 being taken off, that is all.

Q. Whose handwriting is that schedule in, Mr. Carter (handing witness)?

The Master: The question is not allowed.

Mr. O'Brien: Exception.

Q. Is that Mr. Rowland's handwriting on the last schedule?

36357

The Master: The question is not allowed.

Mr. O'Brien: Exception.

The Master: We spend entirely too much time on these schedules.

Mr. O'Brien: I suggested to your Honor that we be given time to go over these schedules.

The Master: I have made my statement.

Mr. O'Brien: What?

The Master: I have made my statement on the record.

Mr. O'Brien: I now move this exhibit be stricken from the record.

36358

The Master: Motion denied.

Mr. O'Brien: I make that motion on the ground that it appears that this Exhibit 467 has inscribed here a number of figures—

The Master: You have gone all over that when you objected to it. I do not want it again.

Mr. O'Brien: This is what appears from the examination of the witness Carter. It has here a lot of figures that are not substantiated, except the statement of some man. The signature of H. E. Gawtry or Mr. Carter's father or Mr. Moss, long since deceased, or any of these other

36359 men, does not give these properties value.

The Master: Motion denied.

Mr. O'Brien: Exception. I would like to call your Honor's attention at this time—I do not want to take up your time needlessly with minute detail, but the price when you turn to brick here you will find was 100 per cent more at that time. You will find the kind of water that was put into this company.

The Master: I am not interested.

Mr. O'Brien: Then I fall back on the assumption that you are going to hold that they handed out stock to the amount of these figures, and

36360 therefore we have got to assume that is what it cost the Consolidated Gas Company, and thereupon compute the base on which the return is to be calculated.

The Master: You are assuming a whole lot when you assume those things. Some of the things you assume are correct, but not everything.

Mr. Ransom: Of course, Mr. O'Brien's reference to the price of brick at that time is quite unwarranted.

The Master: Do not let us go into that.

Q. Mr. Carter I call your attention to an item on the supplementary schedule of the Municipal Gas Light Company and ask you if this item books and stationery, $1,100 rent that the Consolidated paid $1,100 for the books of this old company?

Mr. Ransom: Objected to as a mere trifling with the time of the Court.

The Master: Objection sustained.

Mr. O'Brien: I suppose we ought to make them all for identification.

The Master: Just as you please.

Mr. O'Brien: I ask that this be marked for identification, schedule of materials and supplies of Municipal Gas Light Company. 36362

Marked Defendants' Exhibit AA-376 for identification.

Q. Is Mr. Thomas K. Lees dead?

The Master: The question is not allowed.

Mr. O'Brien: I will ask that this paper be marked for identification.

The Master: What is it?

Mr. O'Brien: The New York Gas Light Company entitled "Real estate."

Paper marked Defendants' Exhibit AA-377 for identification.

36363

Mr. O'Brien: They have even got in that personal taxes, your Honor.

The Master: What do I care? Mark your papers for identification and talk about them afterwards.

Mr. O'Brien: New York Gas Light Company paper entitled "Summary of Assets and Liabilities."

Paper marked Defendants' Exhibit AA-378.

Mr. O'Brien: New York Gas Light Company, paper entitled "Mains, Meters and Services."

36364

Paper Marked Defendants' Exhibit AA-379.

Mr. O'Brien: Paper entitled "Valuation of Buildings, Gas Producing, Gas Storage," etc., of the New York Gas Light Company, located between First Avenue and the East River and 20th and 22nd Streets.

Paper marked Defendants' Exhibit AA-380 for identification.

Mr. O'Brien: Paper entitled "Mains, Meters, Services, Real Estate, and Recapitulation of Values," Manhattan Gas Light Company.

Paper marked Defendants' Exhibit AA-381

36365 for identification.

Mr. O'Brien: Paper, Manhattan Gas Light Company, entitled, "Plant Valuation of West 18th Street Station."

Paper marked Defendants' Exhibit AA-382 for identification.

Mr. O'Brien: Paper entitled "Plant Valuation of East 14th Street Station," Manhattan Gas Light Company.

Paper marked Defendants' Exhibit AA-383 for identification.

Mr. O'Brien: Paper entitled "Liabilities of Municipal Gas Light Company, November 11, 1884."

36366

Paper marked Defendants' Exhibit AA-384 for identification.

Mr. O'Brien: Paper entitled "Inventory of Supplies," New York Gas Light Company, November 10, 1884.

Paper marked Defendants' Exhibit AA-385 for identification.

Mr. O'Brien: Paper, Manhattan Gas Light Company, "Schedules," being a folder which includes two papers, one of which is entitled "Liabilities of Manhattan Gas Light Company, No-

vember 11, 1884"; and a further paper entitled "Recapitulation of Cash Assets of Manhattan Gas Light Company not in Original Schedule."

Folder marked Defendants' Exhibit AA-386 for identification.

Mr. O'Brien: A further paper, entitled "Schedules, Harlem Gas Light Company," being a statement of indebtedness of Harlem Gas Light Company and contracts and agreements.

Paper marked Defendants' Exhibit AA-387 for identification.

Mr. O'Brien: Paper entitled, "Liens, Encum- 36368
brances, Debts and Obligations of Metropolitan Gas Light Company, November 10, 1884."

Paper marked Defendants' Exhibit AA-388 for identification.

Mr. O'Brien: Paper entitled, "Inventory of Manhattan Gas Light Company, November 11, 1884."

Paper marked Defendants' Exhibit AA-389 for identification.

Mr. O'Brien: Paper entitled "Contracts, Metropolitan Gas Light Company."

Paper marked Defendants' Exhibit AA-390 for identification.

Q. Mr. Carter, wherever any property has been 36369
written off have you uniformly referred to these schedules since 1884?

A. Either to those schedules or Document 47.

The Master: Well, if they were included in it?

The Witness: If they were included.

The Master: But property acquired since then—

The Witness: Only such property, of course, as was included in the original schedule.

Q. Was there any reason why you should refer in some instances to these schedules and in other cases not refer to these schedules?

A. You mean to Document 47 instead of the schedule? Simply to preserve the papers, not have them worn out by handling.

The Master: Some of these papers are a little more detailed than Document 47, are they not? Some of them supplement the information in Document 47?

The Witness: The supplementary schedules
36371 deal with material and supplies, and of course there would not be any reference in that case.

Mr. Ransom: The documents that bear the initials, "J. I. G." the initials of Senator Gilbert, were the ones that were put in Appendix H?

The Master: Are we through now with Mr. Carter? Give those back to Mr. Alrich.

The Witness: There was one question that Mr. O'Brien asked that was not answered clearly, that might look badly in the record. He asked for the difference between the aggregate of $11,940,000 and the value of the plant which went to the Manhattan station, some 1,700,000 odd
36372 dollars and the reference to that, of course, even combining the two plants, the 14th and the 18th Street, and for new mains, meters and services and franchises, also, does not account for the entire 11,940,000, it being necessary to include the real estate at $4,188,000 in order to have that complete.

By Mr. O'Brien:

Q. Mr. Carter, you say real estate at 4,000,000?

A. It may be divided there.

Q. You mean real estate at $3,563,000?

A. Then if we take it at that figure we will have to put the bulkhead in at $425,000, the office at

$175,000, and $5,000 for the laboratory and $20,000 for office furniture. The items now enumerated aggregate $11,940,000.

(Witness excused.)

The Master: You rest, I understand?

Mr. Ransom: I do.

The Master: The complainant rests. The motions to dismiss presumably are renewed?

Mr. Chambers: I would like to make it in the same detail as before.

The Master: It will be assumed that the motions to dismiss have been renewed and repeated 36374
at this time in the same detail. The motion is denied and an exception allowed.

Mr. Chambers: Can't I have it repeated in the record?

The Master: What is the use of wasting the time?

Mr. Chambers: It won't take the stenographer a minute to write the fourteen points.

Mr. Ransom: The fourteen points are discredited.

Mr. Chambers: Then the fourteen grounds are repeated verbatim.

The Master: They are repeated verbatim, and 36375
any other ground?

Mr. Chambers: And exception given to the denial of the motion?

The Master: Yes, to all of the defendants.

Mr. Ransom: We have had a lot of vouchers that are called for by Major Clark by letter, covering a number of pages, I don't know how many vouchers, but running into many hundreds, that were asked for for this morning. We have had a taxicab full of them up here today. Apparently they are not going to be needed today.

The Master: Well, keep them here and we will see.

Mr. Chambers: You can bring them back here tomorrow morning. I know about that, and I suggest that you have them here. I don't say we won't need them today, but I am willing that they should go back today.

Mr. Ransom: We will keep them. They were called for by Major Clark, who is not here.

Mr. Chambers: You mean Major Clark is not here?

36377 Mr. Ransom: Is he?

Mr. Chambers: You just rested your case. He is not here because I told him we would not reach his part of the case this afternoon.

Mr. Ransom: Well, he called for these hundreds of vouchers last night.

Mr. Chambers: I suggested that he go away.

Mr. Ransom: I don't doubt it.

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MATTHEW J. CAHILL, recalled testified as follows:

DIRECT-EXAMINATION BY MR. CHAMBERS:

36378 Q. Now, Mr. Cahill, take Block 987, Lots 41, 42, 43 and 51 in the years 1914 and 1915, can you give me the dimensions?

A. Yes, sir.

Q. Will you give the dimensions?

A. Lot 41, 25 x 92, vacant.

Mr. Ransom: I move to strike out the word "vacant."

The Master: Motion denied.

Mr. Ransom: Not responsive, and the witness is not qualified to judge whether property which,

according to the testimony, is used for various storage purposes, was vacant. The most that by any stretch of the imagination this witness could know, is whether there were buildings on it.

The Master: I will have him explain. You mean there were no buildings on it?

The Witness: No buildings on it.

Mr. Ransom: What year are you referring to?

The Witness: 1914 and 1915.

Mr. Ransom: His statement is contrary to the testimony in the case. 36380

Q. Just give me the dimensions of that again?

A. 25 x 92.

Q. Now, Lot 42, the dimensions?

A. 25 x 92.

Q. Lot 43?

A. 77 feet 4 by irregular.

Q. Lot 51?

A. 55 x 69, irregular.

Q. Now, you assessed those lots, did you?

A. Yes, sir.

Q. For the year 1914 and 1915?

A. Yes, sir.

Q. Have you got the map here?

A. Yes, sir. 36381

Q. What we want, Mr. Cahill, is this whole lot here, bounded by Avenue B, 21st Street, East 20th Street and the Marginal Street.

A. That is all known as Lot 37.

Q. The whole business?

A. Yes

Q. That is the strip on Avenue B?

A. That is 37, and this piece here is recognized here.

Q. This triangle?

A. This triangle is recognized as 41, 42 and 43.

36382 Matthew J. Cahill, Direct.

Q. Now, those together, 37, 41, 42 and 43, those make an area described how, 184 feet on Avenue B?

A. Yes, sir, 184 x 88 x 77, irregular.

Q. And the other lots?

A. 41, 42 and 43 make 25 x 92, 25 x 92, that is 50 x 184 and 77 x irregular.

Q. Now, all those together, 41, 42, 43, 51 and 37, cover this Block 987 that we have described?

A. Yes, and 51.

Q. Now, give the total assessed valuation you
36383 placed upon all that property, Lots 41, 42, 43, 51 and 37 for the assessment year 1914?

The Master: Unimproved.

Q. Wholly unimproved?

A. Well, it is not wholly unimproved.

Q. Well, you can give me the assessment wholly unimproved, first, can't you?

Mr. Ransom: This is over the objections which I have previously made that this is not within the period of inquiry in this case, and has no bearing upon any question presented to the Master for finding, and incompetent, immaterial and irrelevant.

The Master: Objection overruled.

36384 A. $100,500.

Q. That is wholly unimproved?

A. Yes.

Q. Now, for the assessment for 1915, the same property?

A. It was not changed, the same.

Q. It would be $100,500 for that wholly unimproved?

A. Yes.

Q. Now, the sum you have given of $100,500 for all of these different lots in those two years, are

those the sums for which the property would sell, in your judgment, under ordinary circumstances?

A. They are.

Q. And is it the full value of the property, in your judgment, unimproved?

A. Yes.

Q. Which has no improvements on and which had improvements on?

The Master: By that, you mean buildings?

Mr. Chambers: Buildings.

The Witness: The only one that had any improvements was that Lot 43, a small building 11 feet 9 by 45. 36386

Q. So you don't value 37 with any improvements on it?

A. No.

Q. Nor 42 nor 51?

A. Yes, we value 37 with improvements on. There was a small tank, I think.

The Master: What kind of a tank?

The Witness: A gas holder.

Q. What improvements were on Lot 42?

A. None.

Q. And 43?

A. There was none on 41 or 42, 43 was a small building 11 feet 9 by 45. 36387

Q. What valuation did you place upon Lot 43?

A. $1,500 for the improvements.

Q. Anything on 51?

A. No, nothing, vacant.

Q. Now, that building on 43, was that the sum for both years, $1,500 for the improvements?

A. Yes.

Q. And is that the value of Lot 43 with the improvements thereon?

A. Yes.

The Master: What?

The Witness: 14,500, 13,000 unimproved

Q. And is that the sum for which it would sell under ordinary circumstances?

A. Yes, sir.

Q. With the improvements on it?

A. Yes, sir.

Cross-examination by Mr. Ransom:

Q. Will you describe that building on Lot 43?

A. One-story building 11 feet by 45 feet.

Q. Brick?

36389 A. Yes.

Q. Will you describe this tank which you have ventured to call a small tank?

The Master: He has not given any testimony of any value for it, you know.

Q. Your figures do not include any value of the tank?

A. This figure I have just given, $1,500, was just for a small building.

Q. It is understood that is not included in this figure?

The Master: The $100,500 was wholly unimproved?

36390 The Witness: Wholly unimproved.

The Master: The only other figure you gave for improvements was this $1,500 for the small building?

The Witness: That is all, that was not included in the $100,500.

Q. Did you value Lot 37 with the improvements thereon?

A. Yes.

Q. Will you give the value of Lot 37 with the improvements thereon?

Mr. Ransom: Objected to.

The Master: That was the tank, was it?

The Witness: Yes.

The Master: Objection sustained.

Mr. Chambers: Exception.

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JOHN F. TRACEY, recalled.

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Block 987, Mr. Tracey, the same lots Mr. Cahill has been talking about, can you give me the value that you placed upon that whole property, Block 987 Lots 37, 41, 42, 43 and 51 for the year 1906? 36392

Mr. Ransom: Unimproved?

Q. Taxes of 1906, wholly unimproved?

Mr. Ransom: Objected to on the ground previously indicated, not within any issue in the case

The Master: Objection overruled.

A. Do you want them added together?

Q. Yes, or you can give them to me separately.

A. I can

Q. Read them off separately, take Lot 37 first, unimproved?

A. 37. I have already given testimony on in the last hearing. 36393

Q. Not for that year?

A. For which year?

Q. 1906?

A. 1906 to 1911.

The Master: Well, give it again.

A. 1906.

Q. This is Lot 37?

A. Block 987, Lot No. 37, 88 feet on 20th Street, 184 feet on the east side of Avenue B and 77 feet on the south side of 21st Street, the unimproved value for 1906, $55,000.

Q. 1907?

A. $55,000.

Q. 1908?

A. $70,000.

Q. 1909?

A. $70,000.

Q. 1910?

A. $75,000.

Q. 1911?

A. $75,000.

Q. Now, Lot 41, for the same period of time, same
36305 Block 987?

A. Lot No. 41, 1906, $6,000.

Q. 1907?

A. $6,500.

Q. 1908?

A. $7,500.

Q. 1909?

A. $7,500.

Q. 1910?

A. $7,500.

Q. 1911

A. $7,500.

Q. Just give me the dimensions of that lot?

36306 A. 25 by 92.

Q. 25 feet fronting on 20th Street?

A. On 20th Street.

Q. Now, Lot 42, first the dimensions?

A. 25 feet fronting on 20th Street by 92 feet in depth.

Q. And your valuation for 1906, 1907, 1908, 1909, 1910 and 1911?

A. $6,000 for 1906; $6,500 for 1907; $7,500 for 1908; $7,500 for 1909; $7,500 for 1910 and $7,500 for 1911.

Q. Now, that is wholly unimproved?

A. The wholly unimproved, both parcels.

Q. Now, Lot 43, same block, 987, the dimensions first?

A. 77 feet fronting on the north side of 20th Street plus more or less on it, by 92 feet on the west end, running to an angle, to nothing.

Q. Now, your valuation for 1906 to 1911, inclusive, wholly unimproved?

A. $12,000 for 1906; $12,000 for 1907; $14,000 for 1908; $14,000 for 1909; $14,000 for 1910; $14,000 for 1911, unimproved.

Q. Now, you have Lot 51, have you?

36398

A. I have.

Q. The dimensions of that?

A. 55 more or less by irregular.

Q. Now, your valuation for that wholly unimproved, 1906 to 1911, inclusive?

A. $7,000 for 1906; $7,000 for 1907; $10,000 for 1908; $10,000 for 1909; $8,500 for 1910; $8,500 for 1911.

Q. These sums you have just given for Lots 37, 41, 42, 43 and 51, for the years 1906 to 1911, inclusive, are those the sums for which in your judgment that property would have sold under ordinary circumstances, wholly unimproved?

36399

A. They are.

Q. Was it the full value of the property unimproved, in your opinion?

A. It was.

Q. What improvements did you find on Lot 37 during any of those years?

A. On 37 was a small gas tank or gas holder on the north part of the lot.

Q. Did you assess that with the improvements thereon?

A. I did.

Q. I ask you to give the value of that lot with improvements thereon for those same years, 1906 to 1911, inclusive?

Mr. Ransom: Objected to on the grounds stated previously as to this kind of testimony.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Now, Lot 42, any improvements on that during any of those years?

A. Vacant from 1906 to 1907, no improvements.

Mr. Ransom: I move to strike out the characterization as vacant, because vacant from the viewpoint of the Tax Department means something very different from—

36401

The Master: When you say vacant, you mean no buildings or tanks on it?

The Witness: Unimproved.

Q. Now, in 1907, what did you find upon it in the way of improvements?

A. What lot do you refer to?

Q. 41?

A. There was nothing on it, it was unimproved, on 41.

Q. All the time you assessed it?

A. From 1906 up to 1911, assessed as unimproved.

36402

Mr. Ransom: I move to strike out "nothing on it," because from the viewpoint of the Tax Department, it is a very different viewpoint.

The Master: When he says vacant or nothing on it, he means no building or anything there in the shape of a structure, is that the idea?

The Witness: It is. I will put it this way.

The Master: You need not put it any way.

Mr. Chambers: I would like to have him put it his way.

The Master: Next question.

Q. 42?

A. Assessed unimproved.

Q. Right straight through?

A. All the way through from 1906 to 1911.

Q. You did not find any improvements on it then?

A. Unimproved.

Q. Now, Lot 43?

A. Lot 43 was assessed as unimproved from 1906 to 1910, inclusive.

Q. Now, in 1910, what did you find upon it?

A. 1910, I say unimproved.

Q. 1911?

36404

A. 1911, a one-story building 11 feet 9 inches by 45 feet.

Q. Did you value that building?

A. I did.

Q. What value did you place on that building for 1911?

A. $500.

Q. Was that in your opinion the full value of that building?

A. It was

The Master: Well, did that building suddenly get there in 1911, or had it been there all these years?

36405

The Witness: That was the first year.

The Master: A building 9 feet—

The Witness: 11 feet 9 inches by 45 feet.

The Master: Well, isn't that the same building—

Mr. Ransom: Started in 1908 or 1909.

The Master: Isn't that the same building Mr. Cahill valued further back, in 1905 and 1906?

Mr. Chambers: No, Cahill valued it in 1914 and 1915.

Q. To make it clear, that building was started in 1911?

A. That is the first discovery I made of that building, in 1911.

The Master: What was it, a brick building?

The Witness: I do not remember whether it was brick or frame.

The Master: What kind of a building could you have for $500?

The Witness: It was only a nominal value placed upon that building, it added no more to the land value.

Q. Now, was that, in your opinion, the full value
36407 of that land with the improvements thereon?

A. It was.

Q. And the prices or the sums for which it would sell under ordinary circumstances with that improvement on it?

A. It was.

Q. Now, 51, anything on that?

The Master: You mean was it improved?

Q. Was it improved?

A. 51 had no improvements.

Q. During all 1906 to 1911?

A. No.

Q. Now, take Block 979, Lot 27, now your dimen-
36408 sions for the years 1906 to 1911, inclusive of that?

A. I have no such lot number in 1906 as 27.

Q. Well, 1907?

A. I have no such lot number for 1907.

The Master: For what year have you got it?

The Witness: For 1908.

Q. Prior to that, could you say what it was a part of? Have you looked at this map?

A. Well, that I could not tell you, you would have to get that information from the surveyor who corrected the map.

Q. Now, 1908, what valuation did you place upon

that, wholly unimproved, speaking of Lot 27, Block 979?

A. $6,000.

Q. 1909?

A. $6,000.

Q. 1910?

A. $6,000.

Q. 1911?

A. $6,000.

Q. Are those sums for which that property would have sold under ordinary circumstances, wholly unimproved, during those years, in your opinion? 36410

A. It is.

Q. Was it the full value of the property, in your opinion, unimproved?

A. It was.

Q. Now, any improvements on that during those years?

A. That was assessed as unimproved property.

Q. Right straight through, so you did not find any improvements on it?

A. I did not.

Q. Block 1092, Lot 7, for 1910, can you give me the dimensions?

A. I can. 36411

Q. What are your dimensions?

A. 516 feet 3 7 8 inches on the north side of 44th Street between Eleventh and Twelfth Avenue, and 430 feet 0 3 4 inches on the south side of 45th Street between Eleventh and Twelfth Avenue.

Q. What valuation did you place upon the whole block and lot?

The Master: Unimproved.

Mr. Chambers: Unimproved, in 1910.

A. $400,000. I gave that testimony before.

Q. Can you give me—will you look at Parcel A of Defendants' Exhibit AA-126, page 8, and can you

give me the value as you placed it in 1911 upon that portion of that block which is described here as Parcel A?

Mr. Ransom: I object to the question, incompetent, immaterial and irrelevant, he did not do any such thing, the statute did not authorize or permit him to do any such thing, the statute provides a method by which he shall make an assessment, and I do not think Mr. Tracey would say that he did place any valuation or undertake to ascertain in the course of his official duties, the

36413 value of any such property.

The Master: I will let Mr. Tracy state. Objection overruled. Well, of the $400,000 valuation that you gave to the entire piece, what value did you give to that part Mr. Chambers has now shown you?

The Witness: I did not assess that as a separate parcel at all. That is part of what is known as Lot No. 7, which includes $400,000 of my value, and this parcel here which the gentleman shows me is a proportionate part of that.

Q. Can you fix the proportionate value of that?

Mr. Ransom: Objected to as incompetent, irrelevant, immaterial, on the grounds already

36414 stated.

The Master: Overruled.

A. I can.

Q. Will you give the figure.

A. The parcel shown as Parcel A on that diagram?

Q. Yes.

Mr. Ransom: Objection sustained?

A. Unimproved, $231,000.

Q. Is that the sum for which that portion of that lot and block would sell under ordinary circumstances, wholly unimproved?

A. That is the proportionate share of that assessment as apportioned, as made for the taxes of 1919.

Q. Well, it is your opinion that that is the full value of that Parcel A, isn't it?

Mr. Ransom: Objected to.

The Master: I will let him say, if he wants to say.

Mr. Ransom: It does not involve any such basis.

A. Well, there would be a question of an element arising if I was placing an assessment on that land and it was in that shape, as to the amount of plot- 36416
tage that I would place upon that property at that time, if it was cut in that shape as this diagram shows.

The Master: All you are prepared to say is the proportionate part of the $400,000 applicable to that would be $231,000, and you are not prepared to say that you would have valued it at $231,000?

The Witness: Not at that time.

Q. Well, place a value upon it now, will you, with the plottage you have in mind, wholly unimproved?

Mr. Ransom: Objected to.

The Master: I will allow it.

A. Wholly unimproved, $231,000 for the parcel 36417
marked A.

Q. And that in your judgment is the sum for which it would sell under ordinary circumstances?

Mr. Ransom: He has not said any such thing.

The Master: Oh, let him say.

A. That is the amount that I would apportion from the $400,000.

Q. Would you say that was the full value of Parcel A?

A. I would not say anything at all as to the full value: that is the proportionate share. I will swear that the $400,000 covers Lot 7.

Q. Is the full value of Lot 7?

A. Is the full value of Lot 7, as it was for the taxes for 1919, as shown upon the tax maps.

Q. And this is the proportion of that $400,000 for Parcel A?

A. This is a proportionate share of that $400,000 as shown upon your diagram.

The Master: In the way that you have figured the $400,000?

The Witness: It was.

Q. Now, Block 1093, Lot 9, for the year 1919?

36419 A. What is it you desire in reference to that?

Q. Can you give me the dimensions of Lot 9, Block 1093?

A. Oh, I can.

Q. As you assessed it in 1919, will you give me the dimensions?

A. On the north side of 45th Street, between Eleventh and Twelfth Avenue 360 feet 2 3 4 inches; on the south side of 46th Street between Eleventh and Twelfth Avenue 265 feet 6 1 4 inches.

Q. What was your first figure you gave, was that 294 feet?

A. No, you asked me what was the area of Lot 9,

36420 Block 1093.

Q. All right. Now, on the rear what are your dimensions?

A. 265 feet 6 1 4 inches, that is on the south side of 46th Street.

Q. Now, the rear of it, will you describe that line running between West 46th Street and West 45th Street?

A. That does not show on the Tax Map for 1919 at all.

Q. Well, I mean yours?

A. Well, it does not run the same as yours, my

line runs on an irregular shape down here, so I cannot give you the line you ask for through here.

Q. I am asking you to give just as shown on the Tax Map?

A. 100 feet 5 inches on the south side of 46th Street to the center line of the block, then running easterly 75 feet, then running southerly 100 feet 5 inches to the north side of 45th Street.

Q. Then it runs westerly along the north side of 45th Street?

A. 369 feet 2 3/4 inches.

Q. Now, give the valuation placed upon that lot 36422
so described for the year 1919, wholly unimproved?

A. $260,000.

Q. Is that the sum for which it would have sold, wholly unimproved, under ordinary circumstances, in your judgment?

A. It is.

Q. Was it the full value of the property unimproved, in your opinion?

A. It was.

Q. Now, speaking of the lot unimproved, can you give me the proportion that this 75 feet, this jog here, this 75 by 100 feet 5 inches by 75, the two dimensions being 75, and the other being 100 feet 5 inches? 36423

A. 100 feet 5 inches, to the center line of the block.

Q. Can you give me that?

Mr. Ransom: I object to it, the witness did not do such thing, his official duties call for doing no such thing.

The Master: Objection overruled.

Mr. Ransom: The mere making of an arithmetical computation based upon comparative areas is not a method of ascertainment of values.

Q. To make it clear upon the record, the property that I want you to finally give me the figure for is Parcel A, which excludes that 75 feet as shown on page 9 of Exhibit AA-126?

A. I can give you the proportionate share of what would cover that.

Q. Will you do that?

A. Figured as a whole?

Q. Yes.

A. The unimproved value of the parcel marked A, in your diagram would be $228,775.

36425 CROSS-EXAMINATION BY MR. RANSOM:

Q. All you mean by proportionate share with respect to these properties is a proportionate value based on relative areas?

A. It was.

Q. You would not make the same allowance for plottage on one of these small parcels that you would put on a large parcel of which they were a part, would you?

A. I would not.

Q. The dimensions you have given, are those which were furnished to you on the City Tax Maps?

A. They were.

36426 Q. And you assumed them to be correct?

A. I did.

Q. You did not in any way undertake to pass on the merits of any litigation or court judgment or controversies between the company and the city?

A. I did not. The surveyor for the Department of Taxes and Assessments is an authority to keep the maps.

Q. Who keeps maps which he furnishes to you, and you assume them to be correct?

A. The law prescribes that I make the assessments according as the tax maps show.

Q. You do not know when this brick building on Lot 43 of Block 987 was built?

A. I do not.

Q. You can't say whether or not, as has been testified in this case, it was built in 1908 and 1909?

A. I cannot.

Q. All you know is that when you went there in the fall of 1910, you found a building there?

A. I may have considered the building as adding no value to the land, and considered it so for 1906 up to the time that I placed a nominal value of $500 on it. The building could have been there at that 36428
time, but not assessed.

Q. You don't know when it was built?

A. No, the first year I assessed it is when I testified to, and I placed a nominal value of $500 on it.

Mr. Ransom: That is all.

The Master: Now, that cleans that up, Mr. Chambers?

Mr. Chambers: Yes.

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ARCHIBALD S. B. LITTLE, recalled: 36429

DIRECT-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Little, were you acquainted with the uses made of gas plants to produce toluol for the Government?

A. Yes, sir.

Q. Was it possible to make 22 candle power gas while producing the toluol for the Government?

Mr. Ransom: I object to that.

The Master: I will allow it.

A. It was.

Q. So that the extracting of the light oils for the use of the Government did not necessarily prevent the company from furnishing its consumers 22 candle power gas?

Mr. Ransom: I object to the question on the ground that it affirmatively appears from the testimony in this case that the matter was one as to which the officers of the United States Army were in charge of the plants of the company, they fixed the quantities of oil that were to be used; they fixed by order the candle power of gas

36431 at the outlet of the holder before it went on the district; they fixed the quantity of gas which might be by-passed, and prevented the by-passing of gas, of the rich gas, for the purpose of keeping up candle power; and likewise dealt with the situation so far as the availability of benzol was concerned. So, that what was possible, has nothing to do with the issue in this case or the situation confronting this company.

The Master: I will hear what Mr. Little has to say. Objection overruled.

Mr. Ransom: Exception.

A. No, not necessarily.

36432 Q. You are acquainted with the contracts that were made, the uniform contracts made by the Government with gas companies in connection with the extracting of light oils?

Mr. Ransom: I object to the question. It does not appear that there was any uniform contract.

The Master: Objection sustained.

Q. Have you seen the contracts made by the Government with gas companies for the production of light oils?

A. I don't know that I have seen all of them; I have seen quite a number.

The Master: Have you seen the contracts with the Consolidated Gas Company?

The Witness: Yes, sir.

Q. Having knowledge of the terms of that contract, will you explain how the complainant company could have produced 22 candle power gas?

Mr. Ransom: That is objected to. It is not a matter of the contract, it is a matter of the conditions under which the company operated.

The Master: I will let him state.

Mr. Ransom: It appears from the record in this case that these Government orders were orders outside of the four corners of the contract; they were given by army officers, uniformed representatives of the United States Army who had been put in charge for the purpose. 36434

The Master: I will take the proof.

Mr. Ransom: Exception.

A. They could have used more oil in the manufacture of gas so as to take care of the loss in candle power that went out with the light oils when the stripping was done.

Q. Was there anything in connection with the process of extracting light oils which would prevent, if the proper amount of oil had been used, gas being furnished at 22 candle power? 36435

Mr. Ransom: I object to that on the ground that it appears from the contract that the Government regulated and fixed the quantity of oil which should be used.

Mr. Chambers: He has repeated that two or three times. It is incorrect, that statement of the contents of the contract is entirely inaccurate.

The Master: I don't recall that I asked for any argument, Mr. Chambers. The objection is overruled.

Mr. Chambers: I cannot permit these statements which are inaccurate to go unchallenged.

The Master: You may answer the question. Exception allowed.

A. You mean furnished when tested according to the provisions?

Q. Yes.

A. No.

Q. Mr. Little, you enumerated, as I recall it, among the processes of making gas in vogue, the chamber-oven method?

36437 A. I did.

Q. And have you prepared a statement of the cost of making gas by that method to the complainant company?

A. I have.

Q. And has there been, and is there today any engineering obstacle to the complainant company in conjunction with its present methods of making gas, using the chamber oven method?

Mr. Ransom: I object to that as incompetent and not within the issues of this case.

The Master: I will allow it.

36438 Mr. Ransom: We are dealing here with the situation of the company which has been circumscribed by pressure requirements, candle power requirements, statutory rates limiting earnings for a considerable number of years, and so far as the purpose of this case is concerned we are not concerned with some other method or some other system of manufacture of a very different sort. We are trying this case on the conditions as they have been imposed on this company by the legislature.

The Master: Objection overruled.

Mr. Ransom: Exception.

A. There are no difficulties, engineering difficulties.

Q. Have you prepared in condensed form a statement of your estimate of the cost of the complainant company of making gas by that method?

A. Yes.

Q. And would you, if categoried in detail, give answers embodying this statement?

A. Yes, sir.

Q. And the answers as thus set forth in this statement would be your statement of your engineering judgment and opinion as to the matters therein covered? 36440

A. That is correct.

Mr. O'Brien: I offer it in evidence, your Honor, as a brief way of stating the testimony of the witness.

Mr. Chambers: To save time.

The Master: I will let it be spread upon the record as the testimony of the witness, subject to objections that might be made to particular questions calling for this information.

Mr. Ransom: I object to the receipt of the document on the ground that it does not relate to any issue in this case. It relates to the production 36441
of a B. T. U. quality, 575 B. T. U.'s quality gas rather than candle power; it does not relate to any condition under which this company is doing business. I call your Honor's attention and desire to set forth on the record what is being done by the defendants. In the first place the Attorney-General puts in a line of proof which is an effort to make us in point of time try a series of fifteen or sixteen rate cases all in one, with respect to the plants which this company has. Then through this and other witnesses they

36442

put in a series of issues on the kind of a rate case that would be presented if there were some other kind of a plant. It is incompetent, irrelevant and immaterial. The witness has not shown any qualification for making this kind of an estimate, he has had nothing to do with the selling and delivery of coke under the conditions prevailing here in New York City market, nothing to do with the purchase and obtaining of materials and supplies or the doing of construction work, the labor market conditions which have been such a serious problem here in the New York City field.

36443 The whole thing is speculative, hypothetical, based on no adequate knowledge or experience of the witness in respect to the subject-matter.

The Master: Objection overruled.

Mr. Ransom: Exception.

The Master: The statement will be taken as the testimony of the witness under oath as to the facts therein stated and set forth.

(The statement referred to is as follows:)

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CONSOLIDATED GAS COMPANY OF NEW

36444 YORK vs. NEWTON, Etc., *et al.*

Before Special Master ABRAHAM S. GILBERT.

I herewith set forth another alternative scheme for the production of gas by the complainant company, at a cost much less than the cost alleged by the complainant. This scheme discloses a plan whereby most of the advantages of a by-product coke oven plant can be secured, and could have been secured in past years.

The proposed installation contemplates a production unit known to the industry as a chamber oven or gas oven plant, which has in its favor, amongst other things, the fact that it gives the user a better control

36445

over the coke market, and, furthermore, furnishes a flexible feature in its gas output control. In the latter respect a gas oven plant is a very desirable addition to an existing gas plant in that it does away with the advisability of having carburetted water gas plant to take care of fluctuating demands for the gas.

A gas oven installation of this kind permits the use of 110 chambers to produce 20 million cubic feet of gas for sale per day. If the necessity demands, nearly 50% of the lean gas can be separated from the first run of gas in the mains and can therefrom be diverted to the combustion chambers for carbonizing coal, thus leaving less gas and more coke for sale.

36446

It is possible, within half an hour, to start the separate producers and furnish from some of the coke a clean scrubbed gas to heat the ovens.

The installation and operation of such a plant to furnish gas to the Consolidated Gas Company has been summarized on the next succeeding sheets.

## DESCRIPTION OF GAS OVEN PLANT.

*Nominal Gas Capacity.* 20,000,000 cubic feet of gas produced per day, on a plant that could and would operate for 10 years without being shut down in whole or in part. All gas suitable for sale.

36447

*Coking Capacity.* 20 net tons of coal per oven per 23 hours.

*Gas from Coal.* 10,800 feet of 575 B. T. U. quality gas from each ton of coal.

*Coal to be used.* 20,000,000 cubic feet of gas divided by 10,800 feet equal to 1,852 tons of coal per day.

*Ovens Required.* 1,852 tons divided by 20 tons per over per diem, equals 92.6 chambers, which I call 100.

36448

*Coal Quality.* Fairmont, Consolidation or equal, high volatile coal costing $5.28 per net ton.

*Coke Yield.* 68% of the coal would be total coke and breeze, and this would be divided into 98% of the total as representing coke and 5% in the form of breeze. In other words, there would be 1,196 tons of coke available for sale or use per day.

*Producer Fuel.* When operating with a single system of gas mains, there would be required, for heating the ovens, 14% of the coal in the form of coke, or 259 tons, leaving 937 tons of coke for use or sale
36449 outside of the gas oven plant.

*Selling Price of Coke.* Figured at $9.00 per ton delivered, or say $7.00 per ton at the gas plant.

*Sulphate of Ammonia.* The yield would be 26 pounds per ton of coal carbonized, or 24 tons of sulphate per day, with the selling price of $75.00 per net ton.

EXPENSE.

| | |
|---|---|
| Coal, 1,852 tons at $5.28, | $9,779. |
| 36450 Conversion charges, including all operating and maintenance labor, materials and supplies other than coal, inclusive of steam, power, oil acids and maintenance materials, based on $1.65 per ton of coal. | 3,056. |
| 259 tons of fuel for producers at $8.00, | 2,072. |
| Producer labor and materials other than coke. | 518. |
| Total operating cost | 15,425. |

INCOME.

| | | |
|---|---|---|
| 1,196 tons of coke at $7.00, | 8,372. | |
| 24 tons of Sulphate at $75.00, | 1,800. | |
| 22,224 gal. of tar at 4.5¢. | 1,000. | |
| Total Income, | $11,172. | |

COST OF GAS.

| | | |
|---|---|---|
| $15,425—11,172 equals | $4,253. | 36452 |
| Making the cost per 20,000,000 feet per day, at the rate of per M cu. ft. made, | .2127 | |
| To enrich this gas to 23 1 2 candle power would require 1.4 gals. of oil at say 6¢. | .0840 | |
| 100 ovens, without the docks and cranes, coal storage, or benzol plant, but inclusive of coal conveyors and bins, and with the gas producers provided, on the basis of 1914 prices. | $3,750,000. | 36453 |
| Present Price, | $8,000,000. | |

The Master: You are through with Mr. Little's direct-examination, are you?

Mr. O'Brien: Yes, your Honor.

The Master: Proceed with the cross then.

Cross-examination by Mr. Ransom:

Q. Mr. Little, when we suspended the examination on a Saturday some time ago Mr. O'Brien and your-

self were referring to the gas rates in London, and you said that there had been no material increase in the rate from 36 cents?

Mr. O'Brien: You say I referred to the gas rate in London?

Mr. Ransom: Yes.

Q. In your statement of qualification you said that you had read the Gas World, and that you relied upon statistics incorporated in that journal?

A. Not entirely. I have read it, and I would rely on the Gas World as being one of the best books in

36455 the country.

Q. I show you the Gas World Directory for 1913, page 95, in which the prices of gas for the South Metropolitan Company in London are given.

A. May I first ask you if your statement is correct as to my reference being to London? I thought it was to Great Britain.

Q. You gave the South Metropolitan Company figure as 36 cents?

A. No, I don't believe so.

Q. I asked you about the South Metropolitan Company, and whether it was one of the large companies in London.

36456 A. I remember referring to the South Metropolitan and to Sir George Livesey's connection with it, in connection with some labor questions.

The Master: Is that one of the large companies of London?

The Witness: Yes, sir.

The Master: Now, 1913, you want to ask something about that?

The Witness: I have the reference that you have shown me.

Q. What is the rate?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial. It is wandering too far away from the United States.

The Master: Objection overruled. The witness started to wander.

Mr. Chambers: Exception.

Mr. O'Brien: Your Honor, I take the burden, but counsel put the statement in my mouth—

The Master: I am not concerned about that. I recall there was something said by the witness about the rates in London. What was it for the South Metropolitan in London? 36458

The Witness: The starting rate was 2 shillings 2 pence. One rate was 9 pence, or 18 cents a thousand cubic feet.

Q. That is the retail rate? What is 2 shillings 2 pence, about 52 cents?

A. About that, or was under the old rates of exchange, which does not exist.

By the Master:

Q. I don't quite understand that. It is 2 shillings 6 pence, did you say?

A. No, 2 shillings 2 pence.

Q. Did you say something about 18 pence?

A. No, 9 pence, or 18 cents. 36459

Q. What was that for?

A. Gas sold to retail consumers.

Q. It started at 9 pence and went up to 2 shillings 2 pence?

A. Yes, sir. They had starting points for certain classes of service.

By Mr. Ransom:

Q. Was not that an extra charge over and above 2 shillings 2 pence for the slot prepayment meters?

A. No, that foot note there shows that to the 9 pence you have to add extra for repay or slot meters.

The 9 pence is not additional. It means that they allow a charge slightly extra, which is not stated in the book, but something additional to the 9 pence for slot meters.

By Mr. Chambers:

Q. What is that, per thousand cubic feet?

A. Yes, sir.

Q. You mean they sell it as low as 9 pence per thousand cubic feet?

A. Yes.

Q. How much money was that in 1913?

36461 A. Well, it is commonly called 18 cents; that is the figure they use.

By Mr. Ransom:

Q. Are you willing to say that that 2 shillings 2 pence in that year, or the other figure which you gave, 9 pence, was not extra for the slot?

A. Well, I can't swear to it exactly.

The Master: Let us have this just as it reads.

The Witness: May I answer the question?

The Master: No, we are going to read this in to the record. I am reading from the Gas World Directory for 1913, the following.

Mr. O'Brien: I object to reading from the

36462 Gas World. The witness said it was not reliable.

The Master: He said it was reliable.

"Place and Postal Address South Metropolitan."

Mr. Chambers: I object to reading that London price or English prices.

The Master: Objection overruled.

Mr. Chambers: Exception.

The Master: "Officials, Addresses, etc., W. Doig Gibb, Chief," and then some other addresses.

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial. It is wandering too far away from the United States.

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Mr. Chambers: I object to reading that London price or English prices.

The Master: Objection overruled.

Mr. Chambers: Exception.

The Master: "Officials, Addresses, etc., W. Doig Gibb, Chief," and then some other addresses.

"Annual make in thousands, 13,136,448." That means 13,000,000,000, does it?

The Witness: Yes, sir.

The Master: "Consumers' total, 359,339; Slot, 257,564; Cookers, 200,903; Candle-power and price, 15 3/4-2-2; 9 pence," with a circle after the pence mark. The foot note opposite the circle says: "Extra for Slot."

Now, is it your testimony, Mr. Little, that 15 3/4 means candle power?

The Witness: Yes, sir.

Q. And that 2-2 means 2 shillings 2 pence? 36464

A. Yes, sir.

Q. And that the 9 pence is not an additional charge, as stated in the foot note, "Extra for slot"?

A. That is my understanding, yes, sir. That can be proved if your Honor wishes it.

Q. I show you the Gas World Directory for 1917—

The Master: Before Mr. Ransom asks that question, on what possible theory can it be worked out that gas is sold at 2 shillings 2 pence, and then at 9 pence? What possible explanation can there be for it?

The Witness: That is usual over there, because they give a special rate, just like the electricians do here, for getting extra business. 36465

The Master: I think you are mistaken about it.

Mr. Chambers: What explanation can there be for charging 18 cents for a slot?

Mr. O'Brien: It is a matter that is easily verified, what is the use of debating it.

Mr. Ransom: Will the Master similarly read in the entries for 1917, for the South Metropolitan Company?

The Master: You can ask the question.

36466 Archibald S. B. Little, Cross.

Q. That shows 2 shillings 8 pence, does it not?
A. That is right.
Q. About 64 cents?
A. Approximately.

The Master: Does that have another reference to extra charge for meters?

The Witness: 9 1/2 pence, with a circle.

Q. Extra for slot?
A. Extra for slot on that, yes.

Mr. O'Brien: That is the foot note?

The Witness: Yes.

36467 The Master: Opposite a circle?

The Witness: Yes.

The Master: The circle following 9 1/2 pence?

The Witness: Yes, sir.

Q. I show you the Gas World for September 27, 1919, a note announcing a further increase, an increase from 4 shillings 4 pence to 4 shillings 8 pence.

The Master: What does that say, Mr. Little?

The Witness: "The South Metropolitan Gas Company announces an increase in price of gas from 4 shillings 4 pence to 4 shillings 8 pence as from the Michaelmas reading of the meters."

Mr. Chambers: I object to this as being irrele-
36468 vant, incompetent and immaterial, and having no bearing on the issues here.

Mr. O'Brien: It is not cross-examination, your Honor, it was not brought out on the direct.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: Exception.

The Witness: "The advance in coal means an addition of £340,000 to the company's coal bill, but part of this will be recovered by a higher price for coke, the balance being paid by the consumer"

"Annual make in thousands, 13,136,448." That means 13,000,000,000, does it?

The Witness: Yes, sir.

The Master: "Consumers' total, 359,339; Slot, 257,564; Cookers, 200,903; Candle-power and price, 15 3/4-2-2; 9 pence," with a circle after the pence mark. The foot note opposite the circle says: "Extra for Slot."

Now, is it your testimony, Mr. Little, that 15 3 4 means candle power?

The Witness: Yes, sir.

Q. And that 2-2 means 2 shillings 2 pence? 36464

A. Yes, sir.

Q. And that the 9 pence is not an additional charge, as stated in the foot note, "Extra for slot"?

A. That is my understanding, yes, sir. That can be proved if your Honor wishes it.

Q. I show you the Gas World Directory for 1917—

The Master: Before Mr. Ransom asks that question, on what possible theory can it be worked out that gas is sold at 2 shillings 2 pence, and then at 9 pence? What possible explanation can there be for it?

The Witness: That is usual over there, because they give a special rate, just like the electricians do here, for getting extra business. 36465

The Master: I think you are mistaken about it.

Mr. Chambers: What explanation can there be for charging 18 cents for a slot?

Mr. O'Brien: It is a matter that is easily verified, what is the use of debating it.

Mr. Ransom: Will the Master similarly read in the entries for 1917, for the South Metropolitan Company?

The Master: You can ask the question.

Q. That shows 2 shillings 8 pence, does it not?

A. That is right.

Q. About 64 cents?

A. Approximately.

The Master: Does that have another reference to extra charge for meters?

The Witness: 9 1 2 pence, with a circle.

Q. Extra for slot?

A. Extra for slot on that, yes.

Mr. O'Brien: That is the foot note?

The Witness: Yes.

36467 The Master: Opposite a circle?

The Witness: Yes.

The Master: The circle following 9 1 2 pence?

The Witness: Yes, sir.

Q. I show you the Gas World for September 27, 1919, a note announcing a further increase, an increase from 4 shillings 4 pence to 4 shillings 8 pence.

The Master: What does that say, Mr. Little?

The Witness: "The South Metropolitan Gas Company announces an increase in price of gas from 4 shillings 4 pence to 4 shillings 8 pence as from the Michaelmas reading of the meters"

Mr. Chambers: I object to this as being irrele-

36468 vant, incompetent and immaterial, and having no bearing on the issues here.

Mr. O'Brien: It is not cross-examination, your Honor, it was not brought out on the direct.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: Exception.

The Witness: "The advance in coal means an addition of £340,000 to the company's coal bill, but part of this will be recovered by a higher price for coke, the balance being paid by the consumer"

Mr. O'Brien: Why, they must have a Bob Livingston over there too.

By Mr. Ransom:

Q. That is an increase in American money equivalent to about $1.04 to $1.12, isn't it?

Mr. O'Brien: I object to that.

The Master: Objection sustained. I can figure that myself. I will take judicial notice of the value of English currency now and heretofore.

Mr. O'Brien: I move that the questions be stricken out on the ground that they are not proper cross-examination, and that they relate 36470
to a particular company in a particular territory in England, the conditions of which we do not know.

Mr. Ransom: Mr. O'Brien brought this out.

The Master: Please, Judge Ransom, don't get into these arguments all the time. Next question. I will rule on the objections that are made.

Q. Mr. Little, do you know of an organization known as the State Railway and Public Utility Commission?

A. I have heard of it, yes, sir.

Q. And that during the war there was a committee of that organization known as its War Committee? 36471

Mr. Chambers: May I call the Master's attention to the record, page 10,335, where you said this: "There is no use comparing conditions in England or on the Continent with conditions here, because I have been all over Europe, and know what they have been getting and how they are living."

The Master: I remember that. Go ahead, Judge Ransom.

Mr. O'Brien: I would press that, will you allow me to verify this statement that I brought this out?

The Master: You can look that up. Go on with your questions.

A. I don't know anything personally about the commission.

Q. Do you know that Mr. Funk, of your commission, was a member of that committee?

A. Yes, I think Mr. Funk, and Commissioner Shaw also.

Q. Do you remember a statement issued by the Illinois Commission and the other State Commissions in 1918, urging utilities to keep capital expenditures reduced to a minimum during the war?

3647?

Mr. O'Brien: Wait a minute. You want to bring Mr. Funk into this case?

The Master: Have you an objection?

Mr. O'Brien: I have a serious objection.

The Master: Well, take it.

Mr. O'Brien: I object to it, that it is incompetent, irrelevant and immaterial.

Mr. Chambers: And not proper cross-examination, and an incompetent way to get before the Court what the Illinois Commission has said or done.

Mr. O'Brien: Your Honor does not want to try this case this way, taking utterances of Public Service Commissions as to adjudications on these vital matters that are not yet passed on by the United States Supreme Court.

3647?

Mr. Chambers: He is violating that rule, and putting matters in the record through his questions. I object to it seriously.

The Master: The objections are overruled. Answer the question.

Mr. Chambers: Exception.

Mr. O'Brien: Exception.

A. I know they acted that way, and on the request of the Comptroller of the Currency, I think.

Q. Or the War Finance Board? A. I don't know.

Mr. O'Brien: This is not cross-examination. The Public Service Commission of Illinois might have made some utterance. That is not cross-examination, and it is not proper even if it was cross.

The Master: Objection overruled.

Mr. O'Brien: Exception. I will ask him something about Mr. Funk in a few minutes that will make Ransom sit up and take notice. 36476

The Master: Whom are you addressing now?

Mr. O'Brien: My adversary.

The Master: I don't want you to.

Mr. O'Brien: Ransom's friend Funk.

The Master: Stop it. Next question.

Q. You do know that upon the recommendation of Federal authorities various of the State Commissions urged public utilities under their jurisdiction to keep capital expenditures to a minimum during the war period?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial. I object to its form, and as an incompetent way to get these matters before the Court; secondary and hearsay. If the Government made any recommendation let us have it. 36477

Mr. O'Brien: My objection is that it is not cross-examination. The whole of the examination of this witness so far by Mr. Ransom has been on matters that were not in the direct testimony at all. You cannot even remotely connect these questions that have just been asked with any testimony in the case.

The Master: I connect it very directly. The witness has suggested that capital expenditures should have been made for changing the plant and putting in additional apparatus and other things. The questions are allowed and the objection overruled. The witness will answer.

Mr. O'Brien: Exception.

Mr. Chambers: Exception.

A. I don't know much about what the other commissions did in that respect. I know, of course, that the Illinois Commission—

36479 Mr. Chambers: There isn't any question.

The Master: Yes, there is. The witness is answering the question.

A. I know the Illinois Commission took such steps during the war.

Q. And you considered that good judgment and good patriotic policy?

Mr. O'Brien: I object to that is incompetent, irrelevant and immaterial, as not cross-examination, and asking a man who is a subordinate of the Commission of Illinois to criticise or to concur with his superiors.

The Master: Objection overruled.

36480 Mr. O'Brien: Exception.

The Master: Did you think that was a good judgment?

The Witness: May I find out if it is the judgment of the Commission, you mean?

Q. Your judgment?

The Master: Do you think it was the proper thing to do during that period?

The Witness: Yes.

Mr. Chambers: What period?

The Master: The period of the war.

Mr. Chambers: We are still at war.

The Master: I haven't seen any fighting for some time.

The Witness: That refers, of course, only to the time when America went into the war.

The Master: I understand the situation.

The Witness: I would like to state, if I may, that since the actual hostilities have ceased the Commission has lifted certain embargoes that it put on, you might say, and is now permitting the companies to go ahead and spend money.

Q. Do you remember testifying in the Freeport case? 36482

A. Yes, sir.

Q. At page 91, that the figure of $27 per ton for cast iron pipe was much below present prices?

Mr. O'Brien: I object to that is incompetent irrelevant and immaterial. He is not confronted with the testimony in that case, and the question does not give us the whole of the testimony. Unless the whole of the testimony is here and you can consult it, or at least have read to you all of the witness's statement in connection with that matter and know the circumstances under which the testimony was given, it is no value and is not proper in this case. 36483

The Master: How is that in conflict with anything the witness has said here?

Mr. Ransom: He has undertaken to give various computations about what this, that and the other costs.

The Master: Show me something about cast iron pipe.

Mr. Chambers: That is the ground of my objection. I was going to make that objection.

Mr. Ransom: Every piece of apparatus of these various kinds of plants.

The Master: I know. If this witness has testified to anything in which he testified to a statement in conflict with what he said in some other proceeding, bring it out; but show me what he testified here.

Mr. Ransom: I am trying to find the basis of the unit prices of these various things that enter into the various kinds of apparatus that are embodied in these various kinds of plants which he proposes to have this company build in place of the plant it now has.

36485 The Master: Do you say that in some of these tables he has set forth what it has cost to build them?

Mr. Ransom: I don't know, he has set forth some figures without details.

The Master: I don't think I can allow this question at this time. I have got to see where it affects his testimony.

Q. What figure did you assume for cast iron pipe in these estimates that you have given in this case how much per ton?

Mr. O'Brien: I don't think there is any part of the testimony that embodies any cast iron

36486 pipe.

The Master: I will allow that question.

Mr. O'Brien: I would like to have you require the interrogator to point to some connection between the question and the witness's testimony.

The Master: If the witness has not figured on cast iron pipe in his computations, he can say so; if he has, then he can answer the question.

A. I may put it this way: There are some very, very slight pieces or quantities of cast iron pipe in this coke oven proposition and chamber oven proposition, but I did not figure it out on that basis of so much

per pound in great detail, in the way your question would assume.

Q. What figure did you assume for cast iron pipe on the pipe that would be required?

A. As I say, I didn't do it that way. I took it on the basis of what it would cost prior to the war, and I have added—

The Master: As to what that would cost prior to the war?

The Witness: Pipe, what he is asking about.

The Master: What did you figure prior to the war? 36488

Mr. Chambers: If he did.

The Master: Well, he had to figure something to give us an estimate of what it would cost to put up a plant.

The Witness: No, sir, I went to people who built plants and got their prices, and I went to the people who had bought plants of this kind and got the prices they paid.

The Master: So your statement of what it would cost to build these plants is entirely based on what somebody else told you?

The Witness: No, sir, I used that only as confirming the cost that I had figured. 36489

The Master: What cost did you figure?

The Witness: The pre-war price of about $30 a ton, and during the present time that price would be closer to $65 a ton.

Q. How much of cast iron pipe did you figure to include in your coke oven construction?

A. Well, I have just told you I didn't do it that way.

Q. You did not form any estimate of the quantities?

A. No, I didn't build up a bill of particulars in that way.

The Master: Did you estimate what it would cost to build a coke oven plant? Have you got a figure in this record? In the testimony that you have given here did you give us a total figure for the cost of producing a coke oven plant?

The Witness: Yes.

The Master: How did you arrive at it?

The Witness: I arrived at it by getting figures from the books of the companies who had built similar plants. I then went to Pittsburgh and inspected certain books and figures there

36491 showing other plants built.

Q. When?

A. My last visit was on Sunday, last Sunday, for the purpose of checking up the figures that I had arrived at.

Q. Have you had the charge of the building of any plant of this kind during the past few years?

A. No, sir. I have inspected the books of companies that have built those plants, though.

Q. You gave the Master a figure the other day of eight million dollars, in response to his question?

A. That was based on pre-war prices.

Q. As of what date?

36492 A. Well, take approximately 1914. That is what I call pre-war. That was about the average of ten years prior to the war.

Q. Have you made any calculations as to what it would be on the basis of present prices?

A. Well, on that particular plant it would be, and I told the Master at the time, about 90 per cent more at this time.

Q. That is, it would be around fifteen million dollars?

A. For that particular kind of plant, yes.

Q. How did you reach your figure, how did you make up a figure of eight million dollars before the war, or your figure of fifteen million dollars now?

A. By taking what similar plants have actually cost, examining the book records.

Q. Can you give us the elements of construction, the various materials and costs, the quantities, the labor, the kind of labor, the wages necessarily payable in New York City?

A. I can, yes, but I haven't those figures here, and did not use the figures in that way. It can be done

Q. Have you ever made up such figures? 36494

A. I have.

Q. I mean as to New York?

A. No. I have made up figures on New York showing some of the items that go in, like fire brick and steel work, but not for a particular plant like this.

Mr. Ransom: I move to strike out this witness's testimony on the cost of building a coke oven plant.

The Master: No, I won't strike it out.

Q. Have you ever been an officer of a gas company operating in a large city in the United States?

A. No, I would not say in a large city.

Q. Well, how large a city? 36495

A. Well, I operated in Vincennes, Indiana, and supplied five or six towns outside of that from the same plant.

Q. When was that?

A. In 1918.

Q. For how long?

A. It is stated in my qualifications in detail.

Q. Well, about how long?

A. Seven months.

Q. Have you ever been engineer or in charge of the

engineering gas production department of a plant in a large city in this country?

A. You mean employed by the company?

Q. Yes, in charge of production?

A. No.

Q. Have you ever been an executive or general manager of a company, having charge of its various departments, in any considerable sized city in this country?

A. No, only in connection with my work for the Commission in Illinois.

36497 Q. You do not there have any responsibility for output?

A. The quantity of gas, no.

Q. Or any responsibility for distribution or sales?

Mr. O'Brien: I object to that as unnecessary questioning.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Mr. Chambers: Why not add, waste of time?

Mr. O'Brien: And useless.

Mr. Chambers: And fishing?

A. I can state quite positively that I have not, outside of the Vincennes operation, had the responsibility

36498 as an employee of a gas company for the production or distribution of gas.

Mr. O'Brien: Your Honor, the witness' qualifications have covered this matter.

Q. What was the capacity of the Vincennes plant?

A. About a million and a half a day.

The Master: What is that, a toy plant?

The Witness: It was not when I was there, no.

Q. What are the annual sales of that company?

The Master: Oh, what is the difference? The company made a million and a half cubic feet a day.

The Witness: I didn't say that, your Honor, I said the capacity was a million and a half cubic feet a day.

The Master: How much did it make?

The Witness: I don't remember now.

The Master: Somewhat less than that?

The Witness: Somewhat less.

The Master: How much less?

The Witness: About ten per cent less.

Q. Are you a stockholder in any gas corporation in this country?

A. I certainly am not. 36500

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial.

The Master: Objection overruled. The witness has already answered that he is not, so what difference does it make.

Mr. Chambers: I wanted to call your attention to the fact that it is wasting time to ask such a question as that. That has no bearing on anything that I could see.

Q. What candle power requirements were you operating under at Vincennes?

A. Not any.

Q. What B. T. U. standard? 36501

A. 600.

Q. What was the candle power actually produced, if you know?

Mr. O'Brien: I am going to object to this, your Honor. We might as well apply the same rule that we did to the defendants in their examination.

The Master: Objection overruled.

Mr. O'Brien: I can't see the point.

The Master: The trouble is that I do see some point.

Q. What was the candle power?

Mr. Chambers: It is too indefinite. When?

The Master: While he was in Vincennes for seven months.

Mr. Chambers: What date? I suppose it varied from day to day.

The Master: What candle power did you produce there during those seven months?

The Witness: I don't know. We had no requirements, so I did not have to test the gas.

Q. Brown's directory states your maximum day's
36503 send-out was 400,000 cubic feet. Is that correct?

A. That is for Vincennes. We supplied five towns in Illinois as well.

The Master: How much was it altogether, if you know?

The Witness: I think a little over one million cubic feet.

Q. What towns in Illinois did you supply?

A. Bridgeport, Sumner, Olney, and Lawrenceville.

Q. This Brown's directory gives the population of the district supplied as 140,000. Is that approximately correct?

A. I believe that would be about right, yes.

36504 Q. Brown's directory gives your percentage of gas unaccounted for as 22 per cent—

Mr. Chambers: When is that population?

Mr. Ransom: 1918.

Mr. Chambers: Population changes every year. New York has increased.

The Master: What was your unaccounted for? Do you know? Was it 22 per cent as Brown's directory says?

The Witness: The company didn't know anything about unaccounted for gas. The company had no station meter when I went there.

The Master: That was an up-to-date plant, was it?

The Witness: No, sir, it was a very not up-to-date plant, and I went there to keep it off the rocks, and I succeeded in doing it. They were selling gas at 90 cents a thousand cubic feet.

Q. The gas holder capacity is given by Brown's directory as 204,000 cubic feet. Is that approximately correct?

A. Approximately, to which you would have to add the high pressure gas storage which was contained in tanks at 70 or 80 or 90 pounds pressure. 36506

Q. So that with the maximum day's send-out of 400,000 you had a total gas holder capacity altogether of how much?

A. Between 350,000 and 400,000 cubic feet, according to the pressure carried in these high pressure tanks.

Q. Do you know how the figure of 22 per cent of gas unaccounted for attributed to this company was computed or arrived at?

A. No, I haven't the slightest idea.

Mr. Chambers: I object to his putting that in. There isn't any testimony that it was 22 per cent. I object to it as incompetent, immaterial and irrelevant. Will your Honor strike out that part of the question? 36507

The Master: No.

Mr. Chambers: I think it is improper for him to read that in, and Ransom will claim hereafter that it was proved as 22 per cent.

The Master: Brown's directory has been accepted here as the standard authority on this character of information.

Mr. Chambers: I beg your pardon, it has not been by me.

The Master: It has been by the witness.

The Witness: Not by this witness.

The Master: Some witnesses are as acceptable as others.

The Witness: Certainly.

Mr. Ransom: It was Mr. O'Brien's witness, or Mr. Chambers' witness that accepted it.

Mr. Chambers: What do you say about Brown's directory?

The Witness: I think that they record very faithfully what the companies tell them, but the
36509 companies exaggerate very often, and sometimes understate. They all want to make a showing before the public, and this is a public document.

The Master: Would they be apt to overstate their unaccounted for?

The Witness: No.

Q. The company under your direction did not understate its unaccounted for, did it?

A. I don't think they did. They had a very large unaccounted for, which was occasioned partly by the fact that they had 28 miles of high pressure mains carrying gas at 90 pounds pressure, and therefore the leakage would be higher than in a place like New
36510 York, or any other place where there was a low pressure distribution system.

Q. That was in the mains outside the city, or inside?

A. That was all over the place, because the Vincennes company assumed the responsibility for the leakage throughout the Illinois territory.

Q. Aside from your experience in this city of 20,000, you never have had responsibility for output or distribution in any American City?

The Master: Question not allowed. It is already covered.

Q. Have you ever had charge of the commercial department in any large American City?

A. Not in the employ of the company, but in the People's Gas Company I was given entire charge, and any recommendation that I made had to go.

The Master: Where was the People's Gas Company?

The Witness: Chicago.

Q. That was in connection with your duties as engineer of the Commission?

A. Yes, sir.

Q. When was that? 36512

A. That was in February, 1919, for about five months.

Q. That was a matter of making recommendations as to changes in plan of operation?

A. It was a matter of giving orders as to what they should do to overcome difficulties that they had got themselves into.

The Master: You were representing the Commission in that capacity?

The Witness: Yes, sir, I was appointed with the knowledge and consent of the company, of course, because they were in a very bad fix.

Q. The second table on Sheet 2 of the statement 36513
which you first put in evidence shows, or purports to show, the amount of gas required per month for 1919, and in the last column the amount required per day?

A. 1918, I think.

Q. 1918, yes. Now, on Sheet 10 of the same statement you have given estimated requirements for 1920 by months?

A. Correct.

Q. Will you compute in the same manner which you made your computation on Sheet 2 the average amount per day which would be required according to your estimate for January, 1920?

A. Almost 91,600,000 feet.

Q. You reach that simply by dividing the total amount estimated for the month by the number of days in the month?

A. 31, yes, sir.

Q. How about February, 1920?

A. Assuming 28 days I suppose, to be normal, not 29

The Master: Well, we are talking about 1920 I don't see how you are going to make 28 out of 29 this year.

36515 Q. You did use 28 in your figures, didn't you?

A. I expect I did, yes, sir.

The Master: They have got to supply gas for 29 days this month I guess.

The Witness: Almost 93,000,000 feet.

Q. 92,900,000 odd?

A. If you want it exactly—

Q. That is exact. That is obtained by dividing your February figure by 28?

A. Yes, sir.

The Master: 28 or 29?

The Witness: 28.

Q. But in reaching your February figure of esti-
36516 mated requirements for 1920, you made provision only for a 28 day month, isn't that so?

A. Yes, I took that into account when I did it. I figured that the rate would not be for one year only, we were trying to find a rate for the future.

Q. But in order to supply during the 29 days of February, 1920, you would have to have a higher figure, a higher quantity than you have shown on Sheet 10 of this statement?

A. Yes, but not more per day.

Q. Now referring to Sheet 3 of Section 1, you there have undertaken to show the capacity of plants?

A. No, sir, capacities claimed by the company.

Q. Of the Consolidated plants?

A. Claimed by the Consolidated Company, yes, sir.

Q. What plants did you figure would have to be run in order to make and secure the quantity of gas which you have just given as the daily average for January and February, 1920?

A. All of Astoria, all of 21st Street, and all of 99th Street.

Q. And that is all?

A. Yes, sir.

Q. That is, in order to reach this figure of 36518
92,500,000 a day you have put in Astoria at 20,000,000 of coal and 30,000,000 of water?

A. No, I have not. That is what the company put in. I have set up what the company claimed at that point. The foot note shows that.

Q. According to your own figures you would have to have practically 92,000,000, practically 93,000,000 in February or daily production in order to meet your own estimate of requirements. What plant do you say would produce that?

A. The plants that I have just stated.

Q. As a matter of practical running—

Mr. Chambers: He has just answered which 36519
plants. Why repeat the same thing. He said 21st Street, 99th Street, and Astoria.

The Master: That is what I understood the witness to say. How much do you get out of Astoria on that basis?

The Witness: Close to 63,000,000 feet a day.

The Master: From Astoria?

The Witness: Yes, sir.

The Master: With a rated capacity of 50,000,000?

The Witness: Yes, sir.

365,20 Archibald S. B. Little, Cross.

The Master: You get more out of it than they say they could get out of it, is the idea?

The Witness: Yes, sir.

Q. That is, the reported capacities are 30,000,000 and 20,000,000?

A. That is right.

Q. And in order to meet your estimate of daily requirements the Astoria plant would have to be run every day during January and February so as to produce 63,000,000?

A. No, they could do that, but they would not have
365,21 to run to that full capacity that I estimate. Some of the other plants also run higher than you claim, could run higher than you claim.

Q. In order to get 93,000,000 you surely would have to run Astoria every day during those months at more than the capacity stated by the company?

A. Oh, yes, certainly, stated at times by the company—let me put it that way. The company has at other times claimed other capacities for that plant.

The Master: Do you mean to say that the complainant company has at any time claimed a capacity for those three units at Astoria of more than 50,000,000 feet?

365,22 The Witness: Not exactly that way, but they have claimed on certain plants—

The Master: I am talking of Astoria.

The Witness: On horizontal retorts and the inclines they have claimed that they can make over 12,000,000 feet a day on each.

Q. Have they ever claimed that they could get more than 50,000,000 at Astoria day in and day out?

A. I haven't seen it in that way, no.

Mr. Chambers: He stated how they claimed it.

The Witness: I have set up what they presen-

ted to the Public Service Commission as their capacities.

Q. How much of this 93,000,000 that you have got to have daily during January and February of 1920, do you say would be made at 21st Street?

Mr. Chambers: I object on the ground that he does not say 93,000,000.

Mr. Ransom: Well, he said 92,900,000.

The Master: Substantially 93,000,000.

Mr. Chambers: He says 92,500,000, doesn't he?

The Master: He says substantially 93,000,000. 36524

A. They could make at least 33,000,000 at the 21st Street plant.

The Master: And their rated capacity is what?

The Witness: 27,500,000 I think, or 28,500,000.

The Master: And you say they could make how much?

The Witness: 33,000,000.

Q. That is, you mean to say that they could make 33,500,000 at 21st Street day in and day out during winter conditions, January and February?

A. Yes.

Q. Such as have existed this year and other years 36525 recently?

A. Yes, sir, by slight changes to your blast arrangements.

Q. And that in spite of the fact that the theoretical plant capacity, the maximum capacity, the rated capacity—

Mr. O'Brien: Claimed by the company.

Q. The rated capacity is only 27,500,000.

A. I object to that statement—

Q. That is the rated capacity.

Mr. O'Brien: What is the use of trying to argue with the witness?

Mr. Chambers: What you claim. I object. He cannot make the witness accept his unfair version.

The Master: What do you allow for 99th Street?

The Witness: 6,000,000.

The Master: What does the company rate that plant at?

Mr. Chambers: I object to that phrase. That is misleading, it is not strictly correct. That is what they claim.

36527 The Master: The company rates 99th Street at 5,500,000, and 21st Street at 27,500,000?

The Witness: Yes, sir.

The Master: That is 33,000,000 together, and 50,000,000 at Astoria. That is 83,000,000?

The Witness: That is right.

The Master: And you say you can produce 93,000,000?

The Witness: 102,000,000.

The Master: Day in and day out?

The Witness: Yes, sir.

Q. Do you say that the sworn statement of the company as to the capacity of these plants is un-

36528 true?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial.

The Master: Objection sustained. This witness says he can do better than you people can.

The Witness: I don't claim I am the only one that can do it.

The Master: But you claim you can do it?

The Witness: Yes, I claim I can do it.

The Master: I don't understand you to say you could do it with the plants as they now are?

The Witness: No, slight changes.

The Master: There would have to be changes?

The Witness: Yes, sir, some changes.

The Master: You don't say you are a better operating engineer than Mr. Woods?

The Witness: No, I do not.

Q. That is, you think the capacities on the basis of the plants as they now are are all right?

Mr. O'Brien: I object to that, he didn't say any such thing.

Mr. Ransom: Let him answer.

A. No, I think they are understated. 36530

Q. To what extent?

Mr. O'Brien: Oh, he has told you to what extent. What is the use of repeating that question?

The Master: I am going to insist that this cross-fire back and forth across the table stop.

Mr. O'Brien: I will object to it, your Honor.

The Master: All right, that is the correct thing to do.

Mr. O'Brien: I object to it as repetition.

The Master: Objection overruled.

A. I would like a little time to work that out if you wish it. 36531

The Master: You can't give it now?

The Witness: No.

The Master: Next question.

Q. On sheet 5 of this same section, you have given what you evidently accept as the capacity of the various portions of the Astoria plant at 53,000,000 cubic feet per day, not 63,000,000?

Mr. Chambers: I object to that question as argumentative. I don't think it correctly represents Mr. Little's testimony on page 5.

The Master: Objection overruled.

365,32 Archibald S. B. Little, Cross.

Mr. Chambers: Exception.

A. On page 5 I show that under the best conditions with good coal, the Williamson machines can make 42,000,000 feet a day. I will go further than that and say they can make 48,000,000 feet a day on twelve-foot Williamson machines. Add that to what you claim for the coal gas, which would be 20,000,000 more—

Q. But your recapitulation of the plant—

Mr. Chambers: I suggest that he finish his answer.

365,33 The Master: Let him finish it.

A. (Continued.) Adding the coal gas which you put at 20,000,000 would make 62,000,000, and I can claim you can easily make 24,000,000 on the two coal gas plants at Astoria.

Q. But you give as your recapitulation after the analysis of what you think could be done under various conditions for Astoria, a total daily capacity of 53,000,000, do you not?

Mr. Chambers: I object to that on the ground that he has just stated that 42,000,000 could be 48,000,000, for one thing.

The Master: Objection overruled.

365,34 Mr. Chambers: Exception.

A. I have set up 53,000,000 which I would consider about the minimum with poor fuel, moderate fuel.

The Master: Where do you say anything on sheet 5 about poor fuel?

The Witness: Under worse conditions, with poor fuel, I have 33,600,000 feet a day. I have 42,000,000 on the line just above that.

Q. Is that coke or coal as fuel?

A. That is coke, by-product coke. To get 4,000,000 out of a machine you will use by-product coke.

Q. In your figures on sheet 5 as to what may be done with the varying kinds of fuel, coal and coke,

they are based upon the operation of all twelve water gas sets day in and day out, without interruption?

A. No. 11.

Q. No, your figures as to what may be produced with the varying kinds—

A. Oh, yes, the total capacity. You could not operate twelve machines two months running without recheckering.

Q. And that would reduce your figures to that extent?

A. It would reduce those particular figures, yes.

Q. If we assume your figures of 23,660,000 cubic 36536
feet shown on sheet 10 as the total requirements for 1920, and divide that by 93,000,000, which represents the approximate maximum average day for January and February, as you have just computed it—

A. It was 91,600,000 for January, and 92,500,000 for February. It would be closer to 92,000,000.

The Master: Well, take 92,000,000.

Mr. Ransom: His February figure was 92,900,000, and his January figure was 91,600,000. You really should divide by 92,900,000. That is the maximum.

The Witness: All right. 36537

Mr. O'Brien: Have you finished your question?

Mr. Ransom: No.

Q. That would show the total number of days use of the capacity of the plant, wouldn't it?

Mr. O'Brien: Oh, no, now, that on its face, to a layman like myself, seems ridiculous.

Mr. Ransom: That may be the trouble.

Mr. O'Brien: Your Honor, he is asking the witness to divide a maximum capacity for the

year by the maximum capacity for January and February.

The Master: I want to see what his purpose is. What is it you want, Mr. Ransom?

Q. What figure did you get as the total number of days use of the capacity of the plant?

A. 255.

Q. Now, if you assume a day's output in January or February about as high as 98,000,000, this figure applied to your total year requirements, would give you what as the total number of days' use of the plant

36539 capacity?

Mr. Chambers: I object to that upon the grounds that that assumption is entirely unwarranted, he has not given any such figure for January and February as 98,000,000.

The Master: Maybe Judge Ransom will.

Mr. O'Brien: Well, he can divide some sum by 98,000,000 himself.

Mr. Chambers: He wants to take these assumptions, and then have him do that in his other figures.

The Master: Let us see what happens. Objection overruled.

36540 Mr. Chambers: I object to it, as there being no basis for any such question.

A. Close to 240.

Q. Isn't it 241?

A. 241, yes. You said use 98, didn't you?

Q. Yes.

A. 241, yes.

Mr. O'Brien: Are you taking the straight 23,000,000,000 or 23,660,000,000?

The Witness: 23,660,000,000.

Q. Have you in the course of your investigations of this company recently learned that the day's output has gone as high as 98,000,000?

A. I have heard rumors to that effect.

Q. By rumors you mean information to that effect?

A. Yes, it came in a round about way.

The Witness: What does that mean, Judge Ransom, that your output was 98,000,000 out of these three plants?

Mr. Ransom: Consolidated output.

The Master: Consolidated output alone?

Mr. Ransom: Yes.

The Master: Does that include 14th and 42nd Street? 36542

Mr. Ransom: Yes, that is exactly what it did do, that is the output of the combined plants went to 166,000,000 plus, and of the Consolidated alone, counting in Astoria.

The Master: And counting in 14th and 42nd?

Mr. Ransom: Yes.

The Master: Went to 98,000,000?

Mr. Ransom: Yes.

Mr. O'Brien: I object to that going on the record. When they submit their evidence, on that, we will analyze it, and we will cross-examine someone here on it. I do not think it is proper to make that statement in the record. 36543

The Master: Yes, I think it is proper to have their contention in the record.

The Witness: I might say I tried to get that figure myself, and I could not do it, there was no way of finding it out.

Q. Did you ask Dr. Weber of the Public Service Commission?

A. No. He did not know.

Q. He did not know?

A. No; he could not know.

The Master: Did you ask him?

The Witness: No, I did not.

Q. Did you ask him whether he had not written a letter to—did you find out whether he did not take the matter up with the company and ascertain within the past month?

A. No, I have only spoken to Dr. Weber once.

Q. Did he show you the letter he wrote to the company about it?

A. No.

Mr. O'Brien: I am going to object to that line
36545 of questioning, your Honor.

The Master: We won't have any more just now. Go ahead.

Mr. O'Brien: Reading that stuff into the record, it is not evidence. You heard their refusal yesterday to give me the pressure charts.

Mr. Ransom: There was no refusal.

Mr. Chambers: I understand nobody can know what that is.

Mr. O'Brien: We will tell the story of it, if you will let me testify a little bit into the record now, we will tell you the story of their pulling up their antediluvian plant from the catacombs
36546 in 42nd Street and kind of brushing it up and giving it a trial heat.

Mr. Ransom: The best way in the world of making the gas they needed.

Mr. O'Brien: It reminds you of the practices of these gypsies that take an old horse out and brush it up and put it upon the pasture a few weeks, and then palm it off on some poor innocent Chautauquans.

Q. On sheet 3 of this same section, you assume a figure of 300 days as the multiplier of the rated daily capacity?

A. Yes.

Q. In order to ascertain whether the plants which you have enumerated can produce the requirements of the company as calculated by you. In view of these computations which you have just made, based in part upon your own figures, and in part upon the assumption of an output of 98,000,000 in the present winter, do you not think that 300 is an unreasonably large figure to take as a multiplier of the rated daily capacity?

A. Yes, I think it is a little large.

Q. How much too high? That is, your own figure 36548
gives—

The Master: He knows what his figure gives, and I do, too.

A. I think 250 would be nearer right. I used the 300 days to get some figures to work on, because I did not have the total figure at that time for 1919, and could not have 1920, of course.

Q. Would you say that 250 was the proper multiplier instead of 300?

The Master: He has so stated.

A. Yes.

Q. Now, assuming, as has been shown, that the annual sales are 18,540,000,000— 36549

The Master: For what year?

Mr. Ransom: For this year, 1919, these are the 1919 figures.

The Master: I do not think that has been shown yet.

Mr. O'Brien: No, your Honor.

Mr. Chambers: I object to that on the ground—

The Master: The total for 1919 has not been shown yet.

Q. Well, assume—

The Master: You can assume that, strike out "as has been shown."

Mr. Ransom: All right, strike that out.

Q. Assume that the sales for the whole of 1919 were 18,540,000,000, approximately?

The Master: Is that the figure you have?

The Witness: Close to it, 18,576,440,300.

The Master: For the Consolidated 1918 sales?

The Witness: Yes.

Mr. O'Brien: That is estimated on the eight months?

36551 The Master: Oh, no, Mr. Little has apparently the figures for the whole year.

The Witness: 1919.

The Master: 1919.

Mr. O'Brien: But those are estimated.

The Master: We will find out. Is that an estimate, or are those the real figures?

A. I understand those are actual.

Q. And with seven per cent unaccounted for?

Mr. O'Brien: Which is unproven.

Q. Well, assuming seven per cent unaccounted for, what does that make the send-out?

A. If you have figured it I will take your figure.

36552 Q. Well, I figure it out on a slightly different figure than you have stated: I figure 18,540,000,000 plus

The Master: Yes.

Mr. Ransom: And that makes a send-out of—

The Master: With seven per cent unaccounted for.

Mr. Ransom: With seven per cent unaccounted for assumed of about 19,940,000,000.

The Master: Would that be approximately correct?

The Witness: Yes, it looks about right.

Q. Now, assuming again the 98,000,000 maximum day in the present year, for the present winter, what does that give you as the number of days' use of maximum capacity?

A. About 203 days.

Adjourned to Thursday, February 12, 1920, at 9:30 A. M.

Last Complainant's Exhibit 467.
Last Defendants' Exhibit AA390.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, Etc., *et al.* 36559

Before: ABRAHAM S. GILBERT, Special Master.

NEW YORK, February 12, 1920.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for Defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 36560
MR. O'BRIEN, of Counsel for Defendant Swann.

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ARCHIBALD S. B. LITTLE resumed the stand.

CROSS-EXAMINATION CONTINUED:

Mr. Chambers: I want to correct the stenographer's minutes of the session on February 9, 1920, page 10809 1 2. The figure which is $1,615,000, Mr. Boylan testified was $161,700.

36561

The Master: The correction will be noted. That is my recollection of it.

By Mr. Ransom:

Q. Mr. Little, on Sheet 3 of Section 1 of the first statement that you put in evidence you, by using the multiplier of 300 days, obtain the result that the yearly make, you say, should not be less than 24,900,000,000 cubic feet. Then you proceed in your analysis of production cost giving figures in cents per thousand cubic feet. Those are all made up on the basis of 1920 requirements, in the total of 23,660,000,000 cubic feet?

A. That is correct.

Q. And sales of 22,000,000,000 feet in 1920?

A. That is correct.

Q. And the production costs which you set forth on this statement are obtained by using that figure of 22,000,000,000 plus, or in certain instances 23,000,000,000 plus instead of the 1918 or 1919 output and sales?

A. That is correct, yes.

Q. On what basis do you assume a more than 20 per cent increase in the send-out and requirements of
36563 the complainant company from 1919 to 1920?

A. At the time when I figured the amount that you would be likely to sell I did not have all of the figures, or any of the figures beyond August, 1919. I therefore calculated what I thought would be the sales for 1920.

The Master: How did you calculate it, on what basis?

The Witness: I have not quite finished. After talking with superintendents at the plants, noting statements here and in the newspapers as to the enormous increase there had been in the consumption of gas.

36564 Q. That is an increase in the maximum day, what you are referring to?

A. It was being kept up day after day, as I understood. I am frank to say though that I think the amount estimated is greater than you will sell, based upon later information that I have received; but I do not think that will have any bearing on the production cost.

Q. Did you ascertain what the increase in annual sales of the company was between 1918 and 1919?

A. Just recently, a day or two ago, yes, sir.

Q. What per cent?

A. I think it is almost nothing.

Q. 2.69 per cent?

A. I assume that is correct, yes.

Q. Do you know how many years it has taken for this company to have such an increase in the annual sales, percentage, as you have assumed to take place in a single year?

A. About nine years, I would say, noting from the table that I have since had prepared, that the sales in 1919 were 15,298,837,062, and in 1918 were 18,029,245,000.

Q. According to your calculations it has taken at 36566
least nine years?

A. According to the facts.

Q. Have you figures there running back beyond that?

A. I have, in 1906. There was quite a good increase from 1906 to 1907.

Mr. O'Brien: Judge, have you got the figures there yourself?

Mr. Ransom: I have them here somewhere.

The Master: Go ahead and cross-examine in your own way.

The Witness: I also noted that 1915 was lower than 1914, they were selling less gas. You were 36567
selling less gas in 1915 than you were in 1910.

Q. In 1915 there was a decrease of 4 1 2 per cent, about?

A. Yes. I don't think that occurred in any other place in the world.

Q. Well, on the basis of your figures it has taken at least nine years to bring about such an increase in annual requirements as you have assumed to take place in a single year. Do you still adhere to your assumed increase of 20 per cent for 1920, and 23,660,000,000 cubic feet requirements for 1920?

36568

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial, whether he still adheres to something.

The Master: The objection will not be sustained, it will be overruled. I think the question is repetition, because the witness has already thrown these figures out of the window, but I am going to let him throw them out again. You have discarded these figures, you say they are too high?

The Witness: Yes, sir, they are too high.

36569 Q. And yet those figures are the divisors which produce the unit cost per thousand cubic feet which you set forth in this statement?

A. No.

Q. Well, how many million cubic feet of sales?

A. You see the way it is built up, if this answers your question, I have taken each plant separately, each unit of a plant separately and divided by the capacity that I think that plant had and still has.

The Master: With additional facilities, with additional machinery of some kind?

The Witness: Very slightly, yes, sir.

The Master: But with additional machinery?

36570 The Witness: Yes.

The Master: Now, I want to get this perfectly clear in my mind. Your testimony is not that those plants could produce more than they have, operated as they have been, but that with additional facilities and apparatus they could produce more at these respective plants.

Mr. O'Brien: I am going to object to the questions of the Master as assuming something that the witness did not say, and taking the cross-examination of counsel for the complainant into his own hands.

36571

The Master: Objection overruled. I am going to let the witness state whether I correctly understand his testimony.

The Witness: There is some slight change, if I may put it that way, in the apparatus, but the greatest change is in the method of running the apparatus, not in additional equipment and apparatus so much, very, very slight. You remember on direct I stated $4,000 or $5,000 in Astoria would accomplish the result.

The Master: I recall asking you directly yesterday whether you would assume to say that you could get better operating results than Mr. Woods as an engineer, and you said no. 36572

The Witness: I think on direct you will find I also stated—

The Master: I don't care whether it is direct or cross, I am trying to get the fact clear in my mind.

The Witness: I am trying to give it to you.

Mr. O'Brien: I am going to object here and protest against the Master entering into an argument with the witness and trying to convince the witness that his view of the matter, his recollection of the testimony, is correct.

The Master: I am not trying to convince the witness at all, but I am going to try to get the facts clear in my mind. 36573

Mr. O'Brien: But you have fallen into the Ransom habit of not letting the witness complete his answer, and the record shows that. With the quick way you have of talking, and incisive manner and all, it does not give the witness a chance to answer the question fully. The testimony on that matter is clear.

The Master: To you?

Mr. O'Brien: Clear to me, yes.

The Master: I want it clear to myself.

Mr. O'Brien: But you are entering into an argument, you say he said so and so yesterday, no matter what he said on the direct. You are simply entering into an argument with this witness and I want the record to indicate that.

The Master: I am permitting you to indicate it on the record, and I have not interrupted you. Now, I am going to get the fact clear in my mind as to what the witness's conclusion was.

By the Master:

36575 Q. What I want to know, Mr. Little, is this, whether it is your testimony that if you took these plants during 1918 and 1919 and ran them just as they have been run by Mr. Woods, with the same material, same labor, same apparatus, you would have gotten a better result than Mr. Woods did?

A. No, first of all, if I ran them exactly as Mr. Woods did, I suppose I would get identical results.

Q. Now, during 1918 and 1919 could you have gotten a better result, do you say, than Mr. Woods, by a change in the method of operation?

A. Yes.

Q. Excluding from consideration any additional facilities?

36576 A. I will say, yes, and then I may add, I could get more than that even by making some slight changes in the apparatus.

Q. Now, I want you to tell me at this point so I will have it clear in my mind, what change in the method of operation you would have instituted in 1918 and 1919 to produce more gas in these plants, equipped as they were, with the material and labor that Mr. Woods had at his disposal?

A. In the first place I would run them longer. I would run the retort houses to capacity and not shut

them down as they were shut down. If you will remember I stated in my previous testimony that I did not believe that it was Mr. Woods' judgment to shut them down, though I am not attacking him as an engineer at all. I want to make that perfectly clear.

Q. I want to get clearly in my mind—

Mr. O'Brien: Your Honor, will you let him go ahead and finish that description?

The Master: I thought he had finished it.

Mr. O'Brien: No, he has not.

The Witness: There was another part. Then, some more could be made by slight changes. 36578

Q. Yes, I am confining myself now to the operation of the plants without changes?

A. I am through with that.

Q. That is what I thought. Now, the Astoria Plant A is a coal gas plant, is it?

A. Yes, sir.

Q. What do you understand was the period during which, or the percentage of time that Mr. Woods ran these plants?

Mr. O'Brien: Your Honor, I want to have it noted as to every question that you are asking that I am protesting against the Master taking over the cross-examination of this witness in the midst of Judge Ransom's examination after Judge Ransom has said off the record that he does not feel prepared to go ahead with this examination in the way in which he would if he had not been sick, and had not been working under the conditions under which he has worked. 36579

The Master: I don't quite get the point of your objection. Don't you want me to get the facts clear in my mind?

Mr. O'Brien: I do, but I think you are not keeping within the domain of the Master when

you undertake to take over the cross-examination repeatedly of every witness in this case.

The Master: Is it the Master's domain and duty to get the facts clear in his mind?

Mr. Chambers: The only thing I object to is I dislike to have you ask Mr. Little to compare his ability with Mr. Woods' ability.

The Master: I am not doing that, Mr. Chambers. Mr. Little has said that if he ran the retort houses the same length of time that Mr. Woods did, with the material and labor that Mr.
36581 Woods had, and without adding any extra facilities, he would not get any better result than Mr. Woods.

Mr. O'Brien: Oh, no, he didn't say that. He said if he ran it in the same way that Mr. Woods did he would not get any different result.

The Master: That is what I have said. He has said the only thing he would have done to get a better result was to have run it more hours, or to a greater extent than Mr. Woods did. I am trying to get clear at this point just what is in Mr. Little's mind on that.

Q. Let me ask you about that, Mr. Little.

36582 A. I might say this, I am not referring so much to 1918 as to what they could do now.

Q. I want 1918?

A. I will tell you what they did in 1918 in Plant A, which is the inclined retort. I claim that in January they could have made 310,000,000.

Q. How many hours did Mr. Woods run it?

A. I don't know; I can tell you what he made, though.

Q. I have got to have the facts.

Mr. O'Brien: Won't your Honor let him proceed to give the facts, and then you can cross-examine him after he gets through.

The Master: I want Mr. Little to have in mind what I am trying to get at. I am very much impressed with Mr. Little's evident fairness and disposition to answer the questions and give the truth and the facts from his own point of view.

Mr. O'Brien: All I want is the continuity of facts. You come in after he starts to give you a statement as to 1918, concerning which you asked him, then you jump in and ask him a question that disturbs that continuity of thought and naturally it is going to be chopped up.

The Master: But he is not giving me what I 36584
want. He says he would have run Plant A more hours than Mr. Woods did. He must then have a memorandum of the number of hours that Mr. Woods ran it, and I want to know how many hours Mr. Woods ran it, and how many hours he could have run it in January, 1918.

Mr. O'Brien: That was preceded by a statement that his exhibit was prepared as of today rather than in 1918, but then he said he had some information about 1918.

The Master: You will have to let me find the facts and stop interrupting.

Q. Mr. Little, do you know what I want? 36585

A. Yes, sir.

Q. Can you give me that information?

A. Not in the way you want it.

Q. Can you give me that information for Plant B in January, 1918?

A. No.

Q. Can you give it to me for Plant C?

A. No, and I don't think Mr. Woods can.

Q. Then how can you say that you would have run it more hours than he did?

A. I can show you what they got.

36586

Mr. Chambers: He can answer that.

The Master: Let me examine him.

Mr. Chambers: You are cross-examining pretty closely. He can tell you, he has it right there.

The Master: I am here to get the facts, and I am going to get it.

Mr. O'Brien: I am protesting against the Master's method of cross-examining this witness.

The Master: You can protest as long and as hard as you please. This witness has undertaken to say that he could have gotten a better production result from the Astoria plant during 1918

36587 and 1919 than Mr. Woods did, and I am going to find out, if it is possible to find out, how he could have done it without additional apparatus or facilities. When I am done with that I am going to find out what he would have done with reference to additional facilities, but before I do that I am going to find out the basis of his statement that he could have produced more gas in those two plants during those two years than Mr Woods did.

Mr. Chambers: He has got it right there, he can tell you.

The Master: I want certain information on

36588 it, I can reach the conclusion.

Mr. Chambers: He can't give it to you in the way you want it.

The Master: He can't do it, then I won't take Mr. Little's result.

The Witness: May I tell you why I can't give you what you want?

Mr. O'Brien: Why don't you let the witness talk?

The Master: Because you interrupt so much that I can't get a chance.

Mr. O'Brien: You have just made a statement on this record that he can't do it.

The Witness: I want to show why I can't do it.

The Master: He has said he can't do it, he just said it again.

Mr. Chambers: He wants to show why he can't give it in hours.

The Witness: I will tell you why.

Mr. Chambers: He says that Mr. Woods even can't give it.

The Witness: To get that I would have to 36590
inspect every daily production record of the Astoria Company.

Q. That could be done, couldn't it?

A. They would not let me have it.

Mr. Chambers: Now, there is your answer.

By Mr. Ransom:

Q. Who would not let you have it?

Mr. O'Brien: The Master is conducting this cross-examination, and I object to Mr. Ransom breaking in.

Mr. Vilas: You were just objecting to the Master breaking in.

By the Master:

Q. Assuming now that they would not let you have 36591
these daily production sheets, how did you arrive at a conclusion that you could have gotten a better result in January, 1918? Let me have that.

Mr. Chambers: I suggest that nobody interrupt him until he gets that out in full.

The Master: That includes Mr. Chambers.

A. Beginning with Plant A—

Q. Take Plant A to illustrate what I want. You need not bother with the other plants. You say you could have gotten better results than Mr. Woods did in January, 1918. Show me how?

A. In Plant A, in January I set up a capacity of 310,000,000 feet. Mr. Woods actually made 308,978,000, just 99.8 per cent of what I claim should have been made.

In February I claim 280,000,000. He made 278,177,000, or 99.5 per cent of what I say was possible.

I can give you all the months if you wish, but I might illustrate by going to May.

In May I claim 193,750,000 cubic feet, and he actually made 221,568,000 cubic feet.

36509 Q. They made more than you say?

A. Yes, 114 per cent as against my 100. That indicates Plant A. Mr. Woods ran it to 94.3 per cent of the restricted capacity that I give as shown fully in my testimony as to certain plants being shut down in certain months.

In Plant B, however, the situation is entirely different. The house has the same capacity almost. I set up 310,000,000 for January, as I did on Plant A. They actually made 140,754,000, or only 45.4 per cent.

Q. Do you know what conditions existed in that month that caused that?

A. That just brings us right to the point, your
36504 Honor, where I stated that I am not going back to 1918, but showing the capacity the plant could reach in 1920.

Q. I have got to go back to 1918?

A. Then the War Department had certain retorts under its control. You are not fixing the rate for 1918, but for 1920, and I am trying to show what the rate should be for the future.

Q. How about 1919?

A. I haven't got 1919.

Q. Why haven't we?

A. Let me see to what extent I have it. I can give it to you.

Mr. O'Brien: I don't know whether your Honor appreciates it or not, but taking that last question, "Why haven't you got it"—

The Witness: I beg your pardon, these figures that I gave were for 1919.

Q. Not 1918?

A. No, sir.

Q. Then it was 1919 that the War Department had Plant B?

A. They had it or the result of their having it would still be shown in the plant.

Q. How about Plant C? 36596

Mr. O'Brien: I don't know whether your Honor appreciates it, the manner in which you put questions at the witness, which carries with it in many of the questions you put, like the last two or three, a rebuke, as it were. You may not appreciate that, it may sound altogether different to you, like my voice is perhaps much louder than I think it is when I am talking. The way you put it just now, "Why haven't you got it," the way you said it, has an effect on the witness.

The Master: I don't think I am going to scare Mr. Little.

Mr. O'Brien: I do not think you are, either, 36597
but I am telling you that so that you will understand my protest.

The Master: Mr. Little is not getting frightened at the way I say, "Why haven't you got it."

The Witness: I don't want to be argumentative or anything like that, but I want the answers in this record in clear form, not only for your sake, but for the sake of the record. Counsel has asked me about my testimony in other cases, in the case of the People's Gas Company, and the

365[illegible] Archibald S. B. Little, Cross.

Springfield case and other cases, and this is going to be used somewhere else, and if my answers are not clear it is going to do me an injury.

The Master: I want your answers clear. I am not concerned about other cases in the future, but I want it clear for this record.

Mr. Chambers: You will understand that if you give us more time Mr. Little can work out anything you want, if they would give him the records.

Mr. Ransom: I don't believe he would work out anything you want.

365[illegible] Mr. Chambers: I would not want to take your judgment on that, or anything.

The Witness: All that information, your Honor, is on page 12 of Section 1 of the report that I put in. In other words, the company made in its C plant in January, 1919, 683,707,000 cubic feet. The capacity that I have claimed is 1,023,000,000 cubic feet.

By the Master:

Q. Do you know why there was a variance?

A. I take it from Mr. Woods' testimony that they desired to keep some of the other plants running in order to keep their force together.

366[illegible] Q. Let me ask you in that connection, Mr. Little, assume now that Mr. Woods did not run Plant B to the capacity which you say it could be run at, that does not affect the cost of gas so far as the material used is concerned, does it?

A. No, that is, actual material f. o. b. the plant.

Q. Which is the big item?

A. That is the big item.

Q. How much does it affect the labor item?

A. I think my figures show that. It would be pretty hard for me to give you the percentage.

Q. Does it affect it materially?

A. Yes, quite a lot.

Q. Of course the smaller production would be affected by the taxes and other overheads as bearing on the number of cubic feet produced?

A. Yes, sir.

Q. But as far as material is concerned it does not make any difference whether you produced this large amount, or a smaller amount in a given plant, the material is just so much material per thousand cubic feet?

A. Yes, sir, up to certain limits. Of course in a 30602
small plant where you have to keep your machine hot for twenty-four hours and you only run it six hours, you have coke being consumed to keep it in operating condition, but that would not affect a plant of this size.

The Master: Go ahead, Judge Ransom.

By Mr. Ransom:

Q. An assumed increase in sales with respect to many matters would give us a larger divisor, and hence a decreased cost in cents per thousand cubic feet?

A. Yes, and that was why I varied slightly the fig- 30603
ures of Mr. Teele when I just set them up and used them without passing upon them, that is the cost beyond the holders.

Q. But you took most of Mr. Teele's figures in that lump sum?

A. Yes, sir.

Q. And used a larger divisor?

A. A larger divisor.

Q. So getting less in terms of cents per thousand cubic feet?

A. But in those things where it would be directly affected by the actual work done I have used his cents per thousand cubic feet.

Q. But in reaching your so-called holder cost of gas you take the 22,000,000 figure as the divisor? I call your attention to the first table in Section 7, Part 2, on page 11,255 of the record?

A. That was to get the leakage.

Q. No, that was to get the cost?

A. That was to get the cost in the holder of the gas sold.

The Master: It would not be the cost of gas in the holder sold?

The Witness: That is the way you determine it. That is the only way I know how to de-

30605 termine it.

Q. In line 12 of your table you use in determining cost made, 23,000,000,000, and in line 14, in determining cost sold, you divided the total amount by 22,000,000 as representing your assumption as to sales?

A. That is merely to get the cost of the leakage.

Q. But you undertake to set out there holder cost of 48 cents plus?

A. 46 cents, isn't it?

The Master: Cost in holder of gas sold, including annual charges, is 49 cents plus, nearly 50 cents.

30606 The Witness: You are referring now to the production cost on line 12.

Q. When and where did you make inquiry for these manufacturing records, whom did you ask?

A. I asked Mr. Sperling.

Q. Who is Mr. Sperling?

A. In the absence of Mr. Lawrence he is the man in charge at Astoria.

Q. Did you ever ask Mr. Davidson through the regular channels at the office in 15th Street?

Mr. O'Brien: I object to that, your Honor.

Mr. Chambers: That is of the Consolidated Gas Company.

A. I can answer that in this way—

Q. You can answer yes or no, whether you went to 15th Street.

A. I can't answer that yes or no.

The Master: Let him answer the way he wants.

The Witness: I went direct to the plant, because that is the only place where I could use these and do any good with them. I was told that I could not have them there, that I would have to 36608
go up and ask Mr. Davidson for them, and they would not have been of any service to me at all.

Q. Did you or anyone bring it to the attention of Mr. Davidson, or any counsel in the case, that you desired the use of these records, and desired it at the plants?

A. I read testimony to the effect that they would have to be examined in the head offices.

Q. Did you make any request of Mr. Davidson, or of me, or of any counsel in the case, or anybody?

A. No, I did not, leaving out the "anybody."

Q. Have you made any studies of the variations of 36609
demands between summer and winter as to the Consolidated Gas Company during 1918, 1919 and 1920?

A. Yes, I set that up in my tables.

Q. During a large part of the summer months the average daily consumption is away down?

A. Yes.

Q. As low as 32,000,000 during some days in summer?

A. The lowest I heard was 34,000,000.

Q. And the average, for example in July, 1918, for the whole month, was only 38,000,000?

A. No doubt.

Q. And that in winter the demand runs as high sometimes as three times the summer demand?

A. Now, I want to know what you mean by the demand, if I may put it that way. The demand of the Consolidated consumers, or the demand of the Consolidated consumers plus the New Amsterdam Company, when they want your gas, and the other companies.

Q. No, the demand of the Consolidated consumers?

A. I don't think it is as high as three times.

36611 Q. Well, the 98,000,000 figure that we were discussing yesterday—

A. That is your send-out. You can't tell, nobody knows that the Consolidated consumers use that. There is no way on earth of telling who used that gas.

Q. But you can figure the quantity of gas—

The Master: Isn't the same thing true of the 32,000,000 or the 34,000,000?

The Witness: Yes.

The Master: Isn't that a send-out?

The Witness: Yes, that is a send-out.

Q. At least the relation on send-out is three times?

The Master: Pretty nearly three times.

36612 The Witness: Yes.

Q. It would be in excess of three times, assuming that the summer demand goes as low as 32,000,000?

A. Slightly, yes.

Q. Did you learn for example that in 1910, on one occasion there was an increase in the send-out of about 50 per cent within five days?

Mr. O'Brien: Just a minute. I am going to object to that. It is attempting to read into the record something that has not been proven, something that if it be a fact the circumstances have not been proven.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. I don't know of that. I have a lot of figures on send-outs. They are going on from day to day, almost every hour changes occur.

Q. Well, you have known of very sharp advances within a few days, of a figure approaching that, haven't you?

A. I have no exact figure in my mind. I know there were big increases, of course. That is natural in any gas plant.

The Master: What causes that? 36614

The Witness: Cold days, and they are using heat a good deal for house warming, which is somewhat new in the gas business. It is one of the things that I took into account that might have an appreciable effect upon the amount of gas to be sold.

Q. Have you ever had occasion to consider, as to a large city, the possible results of an interruption in gas service, the going out of supply at some time during the day or night?

A. I have.

Q. Such a thing is a very serious contingency?

A. Very.

Q. There is no time in the 24 hours when the resumption of a supply of gas after interruption, in a large city, with varying types of population, under varying living conditions, might not be attended with many accidents of fatality, with asphyxiation? 36615

Mr. O'Brien: Well, they have that now.

A. You would have to guard against that if your gas ever went off. You would have to advise the people.

Q. The important thing at all hazards is to keep the supply going in a large city?

A. A gas man is disgraced if he lets the supply off. I don't think it has ever happened in a hundred years in the gas industry in any large town.

Q. What is that?

A. I don't think it has happened in a hundred years in the industry throughout the world, that the supply of gas in any large town has ever gone off.

Q. You mean the total supply in a city?

A. Yes, except San Francisco.

Q. And Boston?

A. I don't know of Boston. San Francisco went
36617 out, but the gas plant did not go out. They were ready to operate, but the city would not let them.

Mr. Chambers: The city went out.

The Witness: The city went out, yes.

Q. Did you ever hear of an instance where that happened in Boston at the time of the big fire?

A. No.

Q. Or at the time of the fire in Baltimore?

A. That is when the city went out, I understand, not when the gas plant went out.

Q. The entire city was not destroyed, was it?

A. But they would not permit the Gas Company to operate. I don't know anything about that, so there
36618 is no use of my attempting to say.

Q. Have you studied the various breakdowns through accident that have taken place in large cities that would have proved disastrous if there had not been reserve capacity available to take up the load?

A. I have seen some very bad accidents in gas plants that did not affect the load. In Birmingham, England I saw the largest purifier house in the world blow up. Gas was kept on the town. It killed four firemen, but gas was kept on.

Q. How was that done?

A. By Mr. Henry Hack, the Chief Engineer, working day and night, and having the men working for him right behind him.

Q. Well, you are aware that there have been various instances in this country where plants have been put out of business through accident?

A. The only one that I know of that went right out was in Far Rockaway. It blew the purifier up. The purifier is the worst thing in the plant if you don't watch them carefully. I know also in Canada when I was building a plant there the holder blew up. The house and everything around the holder was not 36620
touched, but four miles away every window was blown out.

Q. Do you know of the instance in this city which put the plant of the Equitable Gas Light Company out of business for several weeks?

A. No, when was that?

Q. That was in January, 1888?

A. No; I was going to school then.

Mr. Chambers: That was the year of the blizzard, wasn't it?

The Master: No, it was not; the blizzard was in March.

Mr. Chambers: But it was the year of the 36621
blizzard.

The Master: Yes.

Q. Do you know of the instance at the 21st Street plant where the Consolidated Company in the month of December, 1898, when an accident put the entire plant out of business?

Mr. O'Brien: I object to this going into the record. I don't know that that is in the testimony.

Mr. Ransom: I want to see what studies he has made.

Mr. O'Brien: He is asking him if he knows about this and that, and he asked the witness Hine the same questions about a number of explosions, and he reads assumed facts into the record.

The Master: How do these questions affect it?

A. I don't know of that. If it had been so serious that they had to cut the gas supply off I would have known it.

The Master: How does these questions affect Mr. Little's testimony?

366,23 Mr. Chambers: It would have been better if the 42nd Street plant had been blown up in 1920.

Mr. Ransom: I want to find out if he knows anything about New York City operating conditions. Here is a man whose experience has been largely in Europe, whose experience in this country has been confined to the operation of a little plant for seven months, where the daily capacity was a small part of the output of a single machine.

Mr. O'Brien: I object to that as contrary to the facts.

Mr. Ransom: The facts speak for themselves.

366,24 Mr. O'Brien: You ought to be specific, Judge. We are going to watch the records. You know you are not dealing with boobs, and when you make a statement of that kind be specific.

Mr. Ransom: The Vincennes plant he has testified to.

Mr. O'Brien: You said the extent of his experience was so many months in such and such plant.

Q. Do you know, Mr. Little, of the explosion and fire at the works of the Central Union Gas Company

which closed down its whole gas plant for something over thirty-six hours, and the water gas plant for twelve hours.

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial and nothing to do with anything that Mr. Little has testified to on direct-examination.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: It assumes a fact not proven.

The Master: Objection overruled.

Mr. O'Brien: Exception. 36626

Mr. Chambers: I think it assumes something that is not the fact.

A. I have heard it, but I don't know anything in detail about it.

Q. Or the explosion at the 44th Street plant in 1896, explosion of blast main which compelled a shut down for more than twenty-four hours?

A. Explosion of a blast main?

Q. Yes.

A. In a water gas machine?

Q. Yes.

A. Never heard of such a thing putting a plant out of business. They have safeguards for that. If it explodes it won't do any harm except to the particular pipe. 36627

Mr. Chambers: Even Mr. Woods there knits his brow.

Q. Where did you ever operate a water gas plant?

A. Personally I never operated as a company employee. I have operated plants in experimental work, as shown in my qualifications, in England.

Q. Didn't you state in your qualifications on page 11171 of the record that you had not built any water gas apparatus?

A. Yes, the generators.

Q. And you have never operated except what you call experimentally?

A. On a water gas plant, no. Of, course, I have been in plants, assisted in the work, helping the men by advice in the operation of that plant.

Q. Did you ever hear of the explosion in Sheboygan, Michigan, which wrecked the purifier plant of the company and so seriously damaged the connections that it was several days before the plant could be put in operation and during this period the City was without gas?

Mr. O'Brien: I object to that as assuming a lot of facts not proven.

Mr. Chambers: It assumes matters that are not facts, I take it.

The Master: Objection overruled.

Mr. O'Brien: Exception.

The Master: They are not proven until they are proven.

Mr. O'Brien: What is that?

The Master: They are not proven facts: they are assumed as part of the question.

Q. Do you know anything about that accident?

A. What year was that?

Mr. Chambers: It seems to me he is making him his own witness on this line.

Q. 1890.

A. No, I don't know of that one. I have testified at different places that some of the plants are run in such a manner that it is a wonder there are not more of them blown up.

Mr. Chambers: The only materiality I can think it has is that it would have been better if two of their old plants had been blown up in 1906.

Mr. O'Brien: The stockholders of the company would have been better off.

Mr. Ransom: If the company had not had them the people in this town, and in your tenements, would have been cold.

Q. Supposing, Mr. Little, that you had been operating the Consolidated System, if you can imagine that, in the winter of 1918-19, and you found that you had a maximum days output of 125,000,000 cubic feet at that time, what would you consider should have been the reserve, the excess capacity over the maximum day? 36632

Mr. O'Brien: I object to that, because there has been nothing in the direct here on reserve.

Mr. Ransom: Why, it underlies the whole exhibit.

Mr. Chambers: I object to it on the ground that it is not proper cross-examination.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Mr. Chambers: Exception.

Mr. Chambers: I want to add to my objection that the assumption is not warranted by anything that I know of in the record.

The Master: Which assumption, that Mr. Little would be the engineer in charge? 36633

Mr. Chambers: No, the assumption that the maximum make was 125,000,000.

The Master: Objection overruled.

Mr. O'Brien: I don't think counsel should be allowed to cross-examine this witness on something that Hine testified to on the direct and cross.

The Master: I will allow it.

Mr. O'Brien: Exception.

A. It is hard to say what the excess should be. Sometimes it could be as low as five per cent. At other times it ought to be up to twenty per cent.

Q. I am asking you about New York City.

A. I would like to finish now, that is quite a question. As already indicated to the Master, there are peaks and valleys in the production, you cannot build a plant every year to take care of the increasing demand. Sometimes you get down to almost nothing in excess of capacity over demand, and then you have to build a big plant to take care of the next four or
366635 five years, so that immediately you have twenty per cent excess capacity. Further answering the question, I don't know anything about the Consolidated System, because in reading the record it was clear that nothing was desired about the system they were confining it to the Consolidated Gas Company, the complainant in this case.

Q. Then you say you have no knowledge of the Consolidated System?

Mr. O'Brien: He says sufficient to answer the question.

A. I have some, but I don't base any of my testimony on that statement.

366636 The Master: I don't know why Judge Ransom put in his question the hypothetical figure of 125,000,000. I take it that your answer is that there is no fixed standard of reserve capacity?

The Witness: That is right.

The Master: That if it gets down as low as five per cent, if you were an official of the company, you would begin to think about getting more?

Mr. Chambers: He didn't quite say that.

The Master: Yes, he did quite say it, and he says it positively now. Will you please answer

that, Mr. Little, the stenographer did not get it. I ask you, if you were the operating official, and you found your reserve had gone down to five per cent, I ask you whether you would not begin to look around for additional reserve capacity?

The Witness: Surely. Of course, you would bear in mind that it would take you a year or possibly a year and a half to get it, and in the meantime you might get below five per cent.

The Master: But the minute you got down to five per cent you would be concerned about getting 36638
additional capacity by the time the five per cent was exhausted?

The Witness: You bet I would.

Q. Assuming that the Consolidated requirements during that winter, the maximum day, was about 72,500,000, what would you say would be the reserve, a safe operating reserve?

The Master: I don't think that is necessary. The witness has told you his judgment about it. I think I can figure out what the situation justifies and warrants.

Q. But if those same requirements in the winter of 1919 had risen to 98,000,000 for the Consolidated 36639
166,000,000 plus for the system, what would be your judgment as to the safety of a reserve of five per cent to twenty per cent?

The Master: I won't allow the question.

Mr. Chambers: I object on the ground that he said he didn't know enough about the system.

The Master: The witness's testimony gives me a very clear picture of what ought to be done by a Gas Company in operating a plant, having in mind the conditions in this City, and I think I can reach a conclusion without asking the witness for his conclusion.

Q. Mr. Little, how long does it take to overhaul a generator, carburetter and superheater, including time of cooling down, removing checkers, rechecking, and making general incidental repairs?

Mr. Chambers: I object to that on the ground that he has not testified anything about that on direct, and it is not proper cross-examination.

The Master: Objection overruled.

Mr. Chambers: Exception.

A. Well, that is quite an indefinite question. It all depends on the size of the generator and the number
36641 of men you have.

Q. Well, generators of the type you are talking about in this statement or exhibit?

Mr. O'Brien: I think he had better split that question up and be a little specific.

The Master: Objection overruled.

A. In from 15 to 30 days, according to the number of men you had, on a 12 foot machine.

Q. Generator linings must receive extensive renewals at least once a year, and sometimes twice a year, in addition to the regular rechecking and current repairs?

A. Yes, repairs are necessary of course quite con-
36642 siderably particularly when you are using poor fuel.

Q. Breakdowns occur in machines in operation requiring at times a day or so to repair the trouble?

A. That is self-evident. Of course you generally have spare units in connection with a machine, blowers, for instance.

Q. Now, in your tables you have assumed a continuous operation of not less than eleven machines at Astoria out of the twelve, operating continuously for twenty-four hours each day, leaving one machine down for repairs, and by so doing you compute 264 hours per day out of those machines?

Mr. O'Brien: I object to that as not giving—he is assuming testimony there without giving the whole of it.

The Master: On cross-examination you very frequently do that?

Mr. O'Brien: Therefore my objection is sustained?

The Master: It is not sustained for that very reason. There is a good deal of cross-examiner's license where you come to cross-examination.

Mr. O'Brien: Some of us have had our licenses revoked. On October 20th I had my li- 36644
cense revoked.

The Master: What happened?

Mr. O'Brien: That was the day when you made your pronunciamento that I should put my finger on certain figures and say they were incorrect before I would be permitted to ask a question.

The Master: You could have done precisely what the counsel for the complainant are doing now. You had the same opportunity and more.

(Question read.)

A. You mean for the total machines?

Q. Eleven times twenty-four?

36645

A. I have assumed eleven sets in use all the time, providing you only get the capacity I have set up of three million.

The Master: Your question is, eleven times twenty-four is two hundred and sixty-four?

The Witness: Yes, sir.

Q. You would assume about one thousand hours between overhauling on each machine?

A. That is right—not overhauling, rechecking.

Q. That would mean that one machine must go down approximately every four days?

A. I don't see how you figure every four days.

Q. How would you figure it?

A. I would figure the number of machines, the number of hours each machine could run.

Q. How often do you say each machine would have to come down?

A. On that basis there would be pretty nearly continuous rechecking—about every four or five days.

Q. A machine would have to come down every four or five days?

A. Yes, one out of the twelve.

30647 Q. If it requires, as you say, fifteen days or thereabouts properly to overhaul a machine, would it be possible to operate, as you say, eleven machines continuously over an extended period of time?

A. It does not take that time to recheck: that was the general repair you were talking about.

Q. How long does it take to recheck?

A. Well, if you were rushed you could do it in four days.

Q. Four to seven days?

The Master: Suppose you take ordinary conditions: not rushing: you can't always rush.

The Witness: It would take about seven days in ordinary work.

30648 The Master: That is a fair average, seven days to rechecker?

The Witness: That would be about right.

Q. That is merely for rechecking?

A. Yes.

Q. Then take seven days. If it requires seven days to rechecker these machines would it be possible on the basis of these figures to operate eleven machines continuously over an extended period of time?

A. No, not with this capacity that I have set up of three million to a machine.

The Master: With any capacity.

The Witness: Yes, with the capacity they are capable of turning out, you could.

The Master: Here is the proposition—you have twelve machines.

The Witness: Yes, sir.

The Master: One or more of them has to be taken down for periods of fifteen days to a month to be entirely overhauled every once in a while.

The Witness: Yes, sir.

The Master: Meantime you have to take a 36650
machine down every four or five days for re-checkering.

The Witness: Yes, one out of the twelve.

The Master: How could you have eleven machines going if you have one machine out of business practically all the time for entire overhauling—

Mr. Ransom: Two.

The Master: No, one entirely overhauling and out of business seven days, and the other machines only last four days, you have got to have at least two out all the time.

The Witness: Unless you increase the capac- 36651
ity of the machine.

The Master: I don't care about capacity, Mr. Little. I am talking about machines.

Mr. O'Brien: You see, your Honor is getting argumentative now, and that is why I have to make my little objection here.

Mr. Ransom: To save the witness.

Mr. O'Brien: The taking over of the cross-examination of the witness out of Mr. Ransom's hands.

The Master: Well, I can only indicate to the witness that I do not understand his testimony and give him a chance to explain it.

The Witness: I can't explain it unless you will let me go into the capacity.

Mr. O'Brien: You are just getting that Ransom habit, it is infectious, of clipping the tail off of every answer. The witness has tried three times to answer that.

The Master: I don't see how the capacity of a machine makes any difference on the fact that the machines have to come down as the witness has testified.

The Witness: I can explain that in a minute.

366553 If you have twelve machines of four million capacity you make forty-eight million a day. If you only make thirty three million you don't have to run eleven or twelve, you would have so many more available for repairs.

The Master: No, but on the basis of your figures how could you do it?

The Witness: Taking on page 5, the eleven sets at three million per day each, and that is what I set up as ordinary, smooth, slow working—

The Master: How could you do that? That is Mr. Ransom's question.

366554 The Witness: You couldn't do it with that capacity that is set up of three million a day, but the machines have a bigger capacity.

The Master: You couldn't do it the way you say on that page it should be done?

The Witness: Not on this page, no.

Q. Your figures in Section 4 as to costs and your tables of water gas capacity at Astoria at the end of Section I, are all made upon the basis of running eleven machines out of twelve continuously?

A. In that way I have given you the advantage, of course, of running the eleven at three million per day.

whereas you could get four million a day if you ran to fair capacity, without pushing them too hard.

Q. Your answer on all these things is that the way to meet the situation is to increase the capacity, what you are getting out of the machines?

Mr. O'Brien: I object to that as altogether too vague.

The Master: Objection overruled.

Mr. O'Brien: Note the form of the question. "Then your answer to all these situations," etc.

The Master: Objection overruled.

Mr. O'Brien: Exception. 36656

A. I have to assume a greater capacity than you are getting.

Q. You assume an increase in capacity through the use of the high blast, high pressure?

A. Yes.

Q. You know they have that already at Astoria, don't you?

A. No, they have not the high blast pressure at Astoria. They have at 99th Street. It all depends on what you call high blast.

Q. You say they have not high blast at Astoria?

A. Yes.

Q. Your theory of increasing the capacity of these 36657
generators at Astoria is based on the use of high blast there?

A. Yes. Not my theory, that is common, accepted good practice.

Q. Now, on Sheet 5 of Section 1, you give a capacity to a 12-foot machine, using anthracite coal, or gas house coke, of 3,300,000 cubic feet per day?

A. No, 3,000,000.

Q. Yes, 3,000,000. What experience have you ever had practically in the operation of water gas machines using gas house coke?

A. I have had experience going around for the Illinois Commission and finding out why certain companies were not getting as good results as others, and I have gone on the operating floor and stayed there nights sometimes for five or six days, not all of that time day and night, sometimes I have stayed twenty-four hours on a machine instructing the men and finding how they were operating and how they could do better, and have made recommendations to such companies as the People's Gas Company as to why they were getting poor results, and they called
36659 witnesses to show why I was mistaken, and then turned around and did the very thing I said should be done, and thanked me for it.

Q. You have never had any operating responsibility in these respects?

A. I call that operating responsibility.

Q. Have you made investigations of the quality of gas house coal made from Pennsylvania and West Virginia coals?

A. I certainly have.

Q. Do you know the gas making qualities of such cokes compared with anthracite?

A. Yes. Coke is better than anthracite, present
36660 day anthracite.

Q. You say that the daily capacity of a water gas machine is more or less when operating on coke as compared with anthracite?

A. More on good retort house coke, if you run it properly to suit the coke fuel.

Q. Don't you have to run shorter runs on gas house coke than on anthracite?

A. Shorter runs, yes. That is why you get shorter blows, and you get more gas per day.

Q. On anthracite you run about eight minutes?

A. Three and five, as a rule; you run five minutes and blow three minutes.

The Master: That is a total of eight?

The Witness: Yes.

Q. And your cycle on gas house coke is about four?

A. Yes, four or five, or six, or seven, or eight. That is just where gas men wander.

Q. Well, the operator of a water gas machine using coke has to work about twice as fast in manipulating his valves, etc., as when operating with anthracite, doesn't he? 36662

A. I think that follows, yes, but with hydraulic controls the operation is a mere nothing. Any man can work there with ease.

The Master: Did you ever do it?

The Witness: Yes, sir, I have done it.

The Master: Yourself?

The Witness: Yes, sir, myself.

The Master: For how long a time?

The Witness: For about a week at a time.

Q. Now, on Sheet 12, this shows plants and capacity as you would recommend them for the operation of Astoria month by month, the fourth column of figures entitled, "Water gas required by the Astoria 36663 capacity," and that is arrived at by subtracting the amount shown in the second clumn, water gas station capacity, 11 12ths of Astoria, from the amount shown in the first column, "water gas required to be made"?

A. That is right.

Q. Will you please deduct from the amount shown in the first column as required to be made in January, the capacity of the Astoria plant on this 11 12th basis which you have shown in the second column?

A. You mean deduct 1,023,000 from 2,219,200,000?

Q. Yes.

A. The answer is 1,195,200,000.

Q. Is that the figure which you set out in the fourth column of figures as the amount of water gas required by the Astoria capacity?

A. No, the figure is 1,093,900,000.

Q. Take February and make the same deduction, what do you get?

A. 1,950,200,000, as against 1,026,000,200.

Q. What would it be for March?

A. March differs, too, being 723,000,000 by deduc-
36665 tion, as shown by the figures on the exhibit, 620,700,000.

Q. Take June. I don't believe that you did February correctly, did you?

The Master: He did not calculate it here correctly?

Mr. Vilas: No.

Q. Will you calculate February again; that is, subtracting 924,000,000 from 2,042,600,000.

A. That is 1,118,600,000 as against 1,026,200,000.

The Master: He said take June now.

The Witness: The figure should be 278,690,000 instead of 179,690,000.

36666 Q. What should it be for April?

A. 539,400,000.

Q. What about May? What should it be for May?

The Master: Is it necessary to go through all these months?

Mr. Ransom: This is the last one I will ask about.

A. 469,280,000.

Mr. Vilas: 469,280,000?

The Witness: Yes.

Q. So that the total variation in these months is approximately 600,000 cubic feet?

A. Yes. That does not affect my later calculations.

Q. Sheet 12 shows in its last column the number of 12-foot sets required in addition to the 11 assumed to be in use at Astoria?

A. Yes, that is right. That number would be changed by this change that was just made. If this change is correct the figures I brought forward here may be incorrect and I would like later to check them up, if I may.

Q. On Sheet 11 in the first table you show the total number of 12-foot machines. 36668

A. 12-foot or equivalent, yes.

Q. Required to produce the estimated amount of water gas for January you show 22 machines?

A. That is right.

Q. On Sheet 12, however, you show 12 machines required in addition to Astoria?

A. That is right, yes.

Q. And taken in conjunction with the table on Sheet 11 this would indicate the use of only 10 machines at Astoria instead of 11?

A. Yes, one or the other of the figures should be changed.

Q. On Sheet 12 for February you show 11 machines required in addition to the Astoria operation, and on Sheet 11 you show a total of 23 machines required to produce the required quantity of water gas? 36669

A. It looks like those two figures had been reversed in typing.

Q. That indicates the use of 12 machines at Astoria?

A. Yes, or 12 at the other place. It looks like that 12 and 11 had been reversed on Sheet 12.

Q. In other words, in January your statement or testimony exhibit as it is put in calls for 22 machines

and in February for 23 machines, and in the month of February requires the operation of all 12 machines at Astoria?

A. Well, that is a mistake. It ought to be changed to 12 on Sheet 12 instead of 11.

Q. For the months of March, April, May and June your Sheets 11 and 12 taken in conjunction indicate the use of 11 machines at Astoria continuously?

A. Yes, that is right.

Q. And through into June. For October and November 10 machines at Astoria?

36671 A. That is right.

Q. And only 1 and 4 outside of Astoria, respectively, for those two months?

A. Which months?

Q. October and November.

A. October, that is right, and November.

Q. And for December only 9 machines at Astoria and 8 from other sources?

A. That is right. This table was set up to see what capacity you would need outside of Astoria, to see if you had enough in the water gas plants.

Q. How do you arrive at any such figures when your schedule is made up showing 12 machines

36672 operating continuously for the first nine months at Astoria and 11 machines for the next three months?

A. I have only got 11 in March, 18 altogether, and 7 at the other stations; 16 in April altogether, 11 at Astoria and 5 at the others. That is correct. 11 in May at Astoria, 11 in June. Only 10 working in Astoria in July, August and September, and none working anywhere else. Although it will be remembered that I provided all the forces, the operating forces—

Q. On your table you have shown the operation of 11 out of 12 continuously, and have made up your

conclusions as to capacity and this increased output on that basis, haven't you?

A. In some months, yes.

Q. All the year 'round?

A. No, they only run ten machines in July, August and September.

The Master: No, but in your other table that you were talking about you were figuring on 11 machines the year 'round, were you not?

The Witness: That only shows they were set up; but you would not need it here. When you come to the other table, you find they only need 12 machines anyway. 36674

Q. The method by which you reach the conclusion or reach your figures of capacity and required plants was based upon the operation of 11 the year 'round?

A. I don't think so, Judge. I have endeavored to set it up in the way that they would run, just to get the gas that they would need in the various months.

Q. In Sections 4 and 5 of your report you advocate the combination of water gas sets at Astoria so as to make 17,000,000,000 plus cubic feet of gas at one central station?

A. I don't advocate it, no; I just set it up so that if the Master wants to know what it would cost at one plant he will have the figures. 36675

Q. You do not advocate it?

A. No, it is not necessary. It would make hardly any difference in the cost.

Q. It would not produce economies?

A. No, not when you get up to that big quantity.

Q. And it would bring certain elements of disadvantage and danger with that much centralization?

A. I do not think there is much danger. I worked that out to see what would happen, and I thought

the Master would like to see what would happen. It was astonishing how little change it made.

Q. Well, isn't there greater protection to continuity of service in having the plant separated to some degree?

A. No, I would not say so. They are bound to be separated to some extent, because when you put them all on the one acreage you would naturally separate them just like you would in making explosives.

Q. On Sheet 7 of Section I you state that during 1912 the New Amsterdam Company received for
36677 the enrichment of gas from the Astoria Company only $12,599.31. Where did you obtain that figure or the information from which it was derived?

A. The Public Service Commission report, page 325, for that year.

Q. For what year—1912?

A. 1912, covering the 1912 operations. You will notice there, Judge, that I state the figures did not look reasonable.

Q. Do you mean the annual report or the printed report of the Commission?

A. The printed report of the Commission.

Q. Do you mean this (handing witness)?

36678 A. No, the printed report.

The Master: The Commission's printed report.

Mr. Vilas: The Commission's printed report?

The Witness: Yes.

By the Master:

Q. And I understand your statement indicates that you doubt the accuracy of that statement?

A. Yes. Or possibly I did not understand it, your Honor. I was trying to get that information.

Q. Why didn't you get the original report on file

with the Public Service Commission if you saw there was an error or felt that there was an error?

A. Well, I did not think it was of sufficient importance in the case. It was a little history only.

By Mr. Ransom:

Q. Did you examine the vouchers of the Astoria and New Amsterdam companies covering this matter?

A. No, it hardly enters into the case at all, I think. The figures do not mean anything one way or the other.

Q. I show you the Annual Report of the Astoria Light, Heat & Power Company to the Public Service 36680
Commission for 1912, page 55, line 12, Coal Gas Enricher Account 605. Under that head, in Manufacturing Cost of Coal Gas, $138,594.58.

A. Well, that figure appears in my report on the same sheet, Sheet 7. That was the total cost, but the other figure of $12,500 appeared to be the amount paid to the New Amsterdam Company. I thought the difference was what the Astoria Company paid itself —that is, credited water gas and charged coal gas.

Q. I show you certain vouchers covering this matter of the Astoria and New Amsterdam companies.

A. Of course the question reads that you show me that report, which I have not seen—which you had 36681
not shown me.

Q. Oh, you had not seen this report?

Mr. O'Brien: No, pass it over, Judge.

The Master: He has already answered it. It is not necessary for him to see it. He said that figure that appears in his statement—

Mr. O'Brien: I object to the question, "I show you a voucher." It is not necessary to show the witness a voucher if they have got some evidence to the contrary.

36682 Archibald S. B. Little, Cross.

The Master: I do not know whether it is yet; I will see what the question is.

Mr. O'Brien: The vouchers are not in evidence, your Honor.

Q. Upon these vouchers there appears an addition of ten per cent on each bill, does there not, in connection with gas enrichment?

A. Yes. Not on all of them, because some of them are credits. This one I am looking at of February 20th shows 12 per cent added to $12,801.18, which was the cost of oil, less the credit for oil tar produced
36683 as computed by the company.

Q. Isn't this item of $12,509.51 which you have taken the ten per cent and not the net total of the charges exclusive of the ten per cent?

Mr. O'Brien: I object to that, your Honor.

A. That may be, but—

Mr. O'Brien: In the first place the witness has stated where he got that figure, from the printed Annual Report of the Public Service Commission. Now, he is handed a voucher that is not in evidence and the interrogator starts to ask him whether the 10,000 is not the same total in that voucher. We are not getting anywhere
36684 on that.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Q. Well, do you doubt at all that what you have done is to take the ten per cent figure instead of the total of the charges, the net total?

Mr. O'Brien: I object to that question, your Honor.

A. The figures show what I did.

Q. Well, is that what you did?

A. No, I took the figures appearing in the report. If the report is wrong my figures are wrong. They

do not affect the testimony as to the cost of gas in 1920, though.

Mr. O'Brien: The witness has stated it does not look reasonable. It is clear.

Q. Will you take this $138,594.58 and deduct your figure of $12,599.51 from that?

A. $125,995.07.

Q. And your figure is just ten per cent of that, is it not?

A. Not my figure; the Commission's figure.

Q. Well, the figure you have taken?

A. Yes, sir. 36686

The Master: Is just ten per cent of that?

Q. Is just ten per cent of that?

A. That is correct.

Q. In the next paragraph on the same page you state that in 1913 the New Amsterdam Company charged the Astoria Company for enrichment $13,026.11. Isn't this item which you have there set forth not the actual amount paid for enrichment, including the ten per cent, but merely the ten per cent alone?

A. I do not know. That figure was taken bodily from the Public Service Commission report for that year, page 288. 36687

Q. I show you this same line 12 in this same report, 1913, Coal Gas Enricher $143,286.98 (handing witness).

A. You say the same report, Judge. This is not the same report that I—

The Master: The report of the same company.

The Witness: But it is not the report I referred to at page 288.

The Master: No, the report of the same company.

Q. The same company's report. It is line 12—the same information in the Astoria report.

A. That is, as I read it, $143,286.98.

Q. Now, deduct from that your figure.

A. That is $130,260.87.

The Master: Is the figure you give just ten per cent of that?

The Witness: Yes, almost exactly.

Q. It is exact, isn't it?

A. I don't want to argue about a couple of cents.

Q. So that what you have done there is to use not
36689 the total cost of enrichment but merely the ten per cent?

Mr. O'Brien: I object to that.

The Master: Objection sustained.

Q. In the tabulation of candle power at the bottom of this Sheet 7, you show the New Amsterdam candle power to be 22.61?

A. Yes.

Q. Where did you get that figure?

A. The same annual printed report of the Public Service Commission, page 41.

Q. Have you got it here?

A. No.

36690 Q. Is that what is called the City test or the works test?

A. I stated that here somewhere. I believe it is the City test.

Q. The City test is something out on the district, is it not?

A. Yes, as I understand it.

Mr. O'Brien: Look it up.

The Witness: I believe it is.

Mr. O'Brien: If you are not sure about it, take it up later.

The Witness: I would if it made any difference.

Q. Have you your working papers here?

A. Oh, certainly.

Q. Did you find out that the station test of candle power for this New Amsterdam Company as shown by the Public Service Commission report was not 22.61 but 29.54?

A. I have not those figures here.

The Master: The question is, did you find that out?

The Witness: No, I did not find it out. 36692

Q. Why, in making a calculation and an assertion that the New Amsterdam Company did not thoroughly enrich the gas at the works, did you compare and combine the Astoria figures with the New Amsterdam tests out on the district instead of the New Amsterdam tests at the works?

A. Because I don't think it could be obtained that way. You would have to know in detail how much gas of the Astoria Company the New Amsterdam Company actually enriched with this richer gas.

Q. Assume that your New Amsterdam works figure, where this mixing takes place instead of being 22.61 is 29.54, what do you get as your candle power on the mixed? 36693

Mr. O'Brien: I object to that, your Honor, as speculative; it does not get us anywhere.

The Master: Overruled.

Mr. O'Brien: Exception.

A. There are not enough figures here to compute that. Besides, computing it would not be reliable, because when you mix two gases of different candle powers, water gas and coal gas, you do not get what you compute but something higher.

Q. You have undertaken now to make Astoria coal and Astoria water gas and New Amsterdam gas in

indicated quantities and by using what you say is the City test a mile or more from the works.

Mr. O'Brien: Now, he did not say that, your Honor.

Mr. Ransom: That is what he said he did.

The Master: Finish your question.

Q. (Continued.) You got a weighted average of 20.92, which led you to the conclusion that the New Amsterdam did not thoroughly enrich the gas?

Mr. O'Brien: I am going to object to that as tricky and speculative, and as assuming something that the witness has not stated.

36695

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. It may be if I had all the figures before me that this table on the bottom of the page and the conclusion therefrom should be changed.

Q. What other figures would you need except the station candle power instead of the district candle power for the New Amsterdam?

A. I would need a whole lot. I would like to know how much gas was mixed.

Q. Are not these quantities correctly given here, don't you think, this thousand cubic feet?

36696

A. I have no means of knowing whether they are correctly given or not.

Q. But you made up a table here which shows a mixture of 5,000,000,000 plus of Astoria coal, 5,000,000,000 plus of Astoria water, and practically 4,000,000,000 of New Amsterdam gas, a total of 14,300,000,000 plus?

The Master: I see what he has done.

By the Master:

Q. In arriving at his figure of 20.92, Mr. Little, you have taken the works test of Astoria coal gas, the works test of Astoria water gas, and the City's test for New Amsterdam?

A. It appears that way, your Honor. That should be changed.

Q. Then that table is unreliable?

A. Yes.

Q. That is the answer to that?

A. It does not enter into our later calculations.

The Master: We cannot waste any more time with that. That table is utterly unreliable; they use two different factors.

Q. The works test of the New Amsterdam must necessarily be higher than the City's test out on the street?

36698

A. Why, it would be, yes.

The Master: So that result is wrong.

Mr. Ransom: It is shown by the report in evidence to be 29.54.

By Mr. Ransom:

Q. Section 2 of your report relating to the "A" plant at Astoria. On page 2 and in the comment on pages 5 and 6 with respect to Items 16 and 28 of the operation of plant "A" data which you set forth, you allow $26,678 for maintenance labor in the retort house and $31,137 for material, making a total of $57,815 to cover general maintenance of the retort house. In your note you state that this provides for resetting 576 lengths of retorts each year, with $600 labor for maintenance and $900 for helpers, costing about $9,300. What prices do you allow in these computations for high grade refractory brick?

36699

A. $58 a thousand.

Q. That is the price as of what date?

A. August, 1918.

Q. Have you any idea of its present price?

A. Present prices are lower than that; not very much.

Q. Is that a New York price which you are quoting?

36700 Archibald S. B. Little, Cross.

A. Yes, Astoria price.

Q. Where did you get it?

A. The price charged by the Didier-Marx Company.

The Master: In August, 1918?

The Witness: Yes, sir; standard 9-inch fire brick.

Q. Would you be surprised to find that the present price in New York City is $69.90 per ton delivered to Astoria?

A. Per ton?

36701 Q. Per thousand, I mean.

A. I would, yes.

Q. That is, your 1918 cost price was $58 or $59?

A. $58.

Q. $58.15?

A. You say $58.15.

Q. Yes.

A. No, $58.

Q. $58 even?

A. Yes. You may have added the unloading charges. That price was f. o. b. alongside dock at Astoria.

Q. If the present price of those brick delivered to
36702 Astoria was $69.90 that, of course, would readjust your figures?

Mr. O'Brien: Naturally.

The Master: That is self-evident.

Q. What about fire clay shapes?

A. The shapes are the same unless they are bigger than 9 inches—inch splits, three-quarter inch, bevel edge and bevel sides.

Q. How much did you assume per ton?

A. They do not buy them by the ton.

Q. Who does not?

A. Nobody does.

Q. How do they buy them?

A. By the thousand. It is the same price, $58 per thousand. Possibly you mean the shapes or brick shapes?

Q. That is what I mean.

A. Not brick shapes?

Q. I said fire clay shapes.

A. I beg your pardon. I did not mean to quibble. $21.85 a ton, net ton, for fire clay blocks.

By the Master:

Q. As of what date?

A. The same date, your Honor. 36704

Q. What date is that?

A. August, 1918.

Q. All these prices are as of that date, August, 1918?

A. No, I am giving the last latest I took into account when I made up my estimate.

By Mr. Ransom:

Q. Would you be surprised if the present price of those delivered in New York City is $20.90 a ton?

Mr. O'Brien: Objected to in form.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. Yes, I would be surprised to know that. 36705

By the Master:

Q. You are talking now about rearranging these plants. Why didn't you get figures since August, 1918?

A. That is not a rearrangement, your Honor. Of course, I will answer your question.

Q. I mean for operation in 1920.

A. The prices of fire clay have been going up and down in the most unaccountable way. They started out before the war at about $18 a thousand; they have been up to $58 and possibly up to $69, and they have

been down within a year to $38, and they are fluctuating a whole lot. The fire brick men are very much up in the air.

By Mr. Ransom:

Q. Where is that, at Chicago or Vincennes?

A. No, that is at St. Louis, where the most of your fire brick comes from.

Q. What about silica shapes, what price did you assume?

A. $38 a net ton.

By the Master:

36707 Q. As of what date?

A. The same date, your Honor, August, 1918.

Q. Why did you take August, 1918, rather than September or June?

A. I took the last figure that I was able to get from some vouchers that Mr. Sangster took up.

Q. Why didn't you get the vouchers from somewhere else? I am not impressed with the idea of your taking the date August, 1918, in view of your statement that they have been fluctuating. They may have been quite low then, I don't know.

A. I can give you a later figure than that, your Honor. Here is February, 1919, and they give silica

36708 at $50 a net ton.

Q. As against what in August, 1918?

A. $38.

Q. What figure did you use in computing this?

A. I used the $50.

Q. You used the $50?

A. Yes.

Q. What has it gone to since then?

A. I don't know.

By Mr. Ransom:

Q. What figure did you use for milled fire clay?

A. Dry mill clay I had a figure as of May, 1919, $11 a ton, and for the ground fire brick that goes with it $16.50 a ton.

Q. Did you examine, you or Mr. Sangster, the vouchers, to find what that is now costing this company?

A. No, evidently not. I asked him to get me as late figures as he could.

Q. Would you be surprised to find that the present price is $16.55 a ton?

A. For the clay?

Q. Milled fire clay, yes. 36710

A. Yes, I would be surprised.

Q. What figure did you assume per bag of Portland cement?

A. I have not that with me. There is so very little used in fire brick.

Q. You do not know what you did assume?

A. No, I have not that with me here.

Q. What in your best judgment was the price?

A. I do not attempt to carry those in my head. I have an awful task to remember figures.

Q. You have no idea what price you assumed for Portland cement?

A. Not right this minute, no. 36711

Q. On the ground brick, what price was it you said you assumed?

A. $16.50.

Q. That is as of what date?

A. I gave that as May, 1919.

Q. Did you examine vouchers to find the present or more recent cost?

A. No.

Q. Would you be surprised to find that the present cost is $18.75 per ton?

A. Yes, I would. Is that bought from the same people?

Q. Yes. What about full length retorts made in either two or three sections; what figures do you assume?

A. The figure I have appears to be $76 each.

The Master: As of what date?

The Witness: That is March, 1918.

Q. That is $76 a section?

A. I take it to be a section, yes.

The Master: In March, 1918?

The Witness: Yes, your Honor. You do not buy them every day; they should go three years
36713 or longer than that.

Q. Don't you know whether this figure you have assumed of $76 is for a section or for the entirety?

A. I should take that to be a section.

Q. How many sections to a retort?

A. On the inclines, three.

Q. Is this $76 figure, then, for a three or a two-section?

A. No, that would be a two-section retort.

Q. Making how much for a full length retort?

A. $152.

Q. That is as of March, 1918?

A. Yes, sir; that is the last figure I have on that.

36714 Q. Would you be surprised to find that these are now costing this company $181.30?

A. I certainly would. I would build them out of blocks, as they ought to be built anyway. In that way you would get nearer a seven-year life instead of the three that I have assumed.

Q. Did you make any examination to find the actual cost of the material delivered at the plant for each batch of nine retorts?

A. No more than stated. It is quite a problem to decide what the price of fire clay would be, your Honor.

Q. Would you be surprised to find that the present cost is $3,351 for each bench of nine retorts, for the material alone, which on the 211/3 benches would amount to $71,476 for material, in place of the $31,000 plus allowed by you?

Mr. O'Brien: Same objection, your Honor.

The Master: Overruled.

Mr. O'Brien: This assumes something that is not in evidence.

The Master: Yes.

Mr. O'Brien: Exception.

A. Assuming those figures, I suppose that would 36716
be correct.

Q. About labor, what have you allowed per day for masons and helpers?

A. I figured $8 a day for the masons.

Q. How about helpers?

A. $6 a day for some and $4 for the others. Common labor, $4.

Q. Do you know at what figure it is possible to contract in New York for the work of rebuilding a bench; that is, the labor element?

A. No, I do not know now. I figure it out at so many hours a day.

By the Master: 36717

Q. What do you mean by "so many hours a day"?

A. That each mason would work.

Q. That the masons are going to do a certain amount of work in a certain number of hours?

A. Yes, sir.

Q. Have you been running a gang of masons in the last year or two?

A. I certainly have.

Q. Where?

A. Down in Vicennes.

Q. I mean here.

A. No, not in New York.

By Mr. Ransom:

Q. How many hours did you assume?

A. Eight hours a day.

By the Master:

Q. It is all based on what you think a man ought to do in eight hours?

A. Naturally, yes.

Q. There is a good deal of question now whether you can get a man to do what he ought to do in eight hours.

A. I know a good deal of labor conditions, your Honor—that you have to ask a man now to do it, 36719 where previously you did not need to tell him.

Q. All these estimates that are based on what you figure a man ought to turn out in eight hours are pretty much speculation?

A. That is true, unless you take into account the conditions, which I did.

The Master: It is the wildest kind of speculation.

By Mr. Ransom:

Q. How much do you figure it ought to cost per bench for labor alone?

A. That is about the furnace crown, of course, as I assumed it here. About $130 a bench. I would 36720 like to check that figure up.

Q. Did you make any examination of the actual results of the use of labor by the complainant in doing this kind of work?

A. Not recently, no. I have gone through those figures at other times, though, when the work was actually being done.

Q. Would you be surprised to find that according to the actual figures the labor expense in rebuilding a bench is now between $800 and $1,000 a bench?

Mr. O'Brien: Same objection.

A. Do you mean above the furnace arch?

Q. Yes.

A. I certainly would.

Mr. O'Brien: Same objection, your Honor: assuming statements that are not in the evidence.

The Master: Overruled. I do not think it is especially useful to ask the witness whether he would be surprised.

Q. On the matter of getting the labor work by contract, that the best contract price obtainable now is $2,000 per bench?

Mr. O'Brien: Same objection. 36722

A. For labor only?

Q. For labor only.

Mr. O'Brien: Same objection.

The Master: Overruled.

Mr. O'Brien: Exception.

A. I certainly would be surprised.

The Master: You see, that gets us nowhere. Would he be surprised does not mean anything. He says he would be surprised, and that might indicate that he would not if your figures are right.

Mr. Chambers: You remember what happened to us when we asked such questions as that. 36723

The Master: It is rapidly happening to Judge Ransom, too. I have already indicated several times, Judge Ransom, that I do not think these things are useful.

Mr. Chambers: But you did not handle us so gently, your Honor.

Q. Will you turn to Section 6, referring to Water Gas Production. On Sheet 5, Section 6, General Maintenance Labor, you show $65,042, which you take as an average of one cent per thousand cubic feet for general maintenance labor?

A. Yes, that is right.

Q. You subdivided that into structures, $7,831; boilers, $15,715; purification, $2,426; holder, $2,564; miscellaneous, $28,443; tools, $8,063?

A. Yes, sir; those are the figures appearing on Sheet 5.

Q. That is for the "C" plant?

A. Yes.

Q. Where have you made the same kind of analysis of the expenditures for maintenance for the "A" plant, as you have for the "C" plant just referred to?

36725 A. I made an analysis, but I did not use it, because the figures appearing in your report for maintenance appear to be too high for the—

Q. (Interrupting.) Well, where is your analysis?

A. You mean in my testimony?

Q. Yes, in this statement.

A. I did not make any such statement and show it in the testimony.

Q. That is, these items of general maintenance, which in the case of the "C" plant you include, and which amounts to $65,042, you omitted in your statement, so far as the "A" plant is concerned, because you thought the company's figures were too high?

Mr. O'Brien: He has already said that.

36726 A. That was not the statement I made.

Q. Well, Mr. O'Brien said that is what you have already said.

A. When I get your question, I will answer it.

Mr. Chambers: You said that was not the statement you made?

The Witness: Yes.

Mr. Ransom: Mr. O'Brien said it was. I prefer the witness's answer.

Mr. O'Brien: Well, I took the tenor of it, rather than the intent.

The Witness: In number 16 item on page 5 of Section 2, it reads, "Besides this force of men, the necessary"—you will notice I allowed $12,500 for the labor and minor equipment additional $2,000; in other words, $14,500 for the labor outside of the bench repairs.

Q. Well, that is just for keeping the machinery and the retort house in good operating condition?

A. All the machinery in connection with the coal gas plant, outside of the unloading, of course, which does not come into the plant.

Q. Where have you included as to the "A" plant .6728
the labor maintenance item corresponding to those which you show on Sheet 5 of Section 6, as to the "C" plant?

A. That is done in a little different way, but the figures are those which I have just quoted, which appear in Item 16 of my analysis of the plant "A" costs.

Q. Well, didn't you find that the actual figures according to the company's experience and its books for the items corresponding to those which you have itemized on Sheet 5, Section 6, as to the "C" plant was, in the case of the "A" plant, an aggregate of $91,894.74, or 4.84 cents per thousand of gas made?

A. No, I did not find that. .6729

Q. What did you find?

A. If my memory is right, I found that the total maintenance cost of all maintenance was around 3 cents on the "A" plant, considerably more on the "B" plant. That was all maintenance, including the bench maintenance, which I have shown separately here.

Q. And did you find that these same items as to structures, boilers, purification, holders, miscellaneous and tools, under the head of General Maintenance Labor, in the case of the "B" plant was $101,977.51?

A. No, I did not find that.

Q. Where in your cost statement for coal gas production, in connection with maintenance labor, do you find the corresponding items of expense to those which you have set out as to the "C" plant totaling $65,000, namely, for structures, boilers, purification, holders, miscellaneous and tools?

A. As already stated, in Item 16, those additional figures appear and for the bench repairs.

Q. You mean this $12,500?

A. And $2,000 more.

Q. That is $14,500 you have allowed?

36731 A. That is right.

Q. Is it your judgment that this $14,500 covers, as to the "A" plant, all of those various items of general maintenance labor which, in the case of the "C" plant, amounts to $65,000 plus? Coal gas maintenance costs substantially more than water gas, doesn't it?

A. You mean in cents per thousand?

Q. Yes.

A. Certainly. I tried to get an analysis made of that work, and could not get it.

Q. On the "A" and "B" plants, how much is this $14,500 for maintenance per thousand?

36732 A. That is not all the maintenance, that is only one little part of it.

The Master: For that branch of it?

Q. Well, for that branch?

A. I think you ought to consider the whole maintenance together.

The Master: No, but let counsel consider what he wants.

The Witness: But he is putting words in here that are not in the record.

Mr. O'Brien: That is the point.

The Witness: It seems to be about 4/10 of a cent a thousand.

Q. Whereas, in the water gas, your figure is one cent a thousand for these same items?

A. For labor and materials, yes, but the other is labor.

Q. What?

A. The other is labor.

The Master: What other is labor?

The Witness: The 4-10 of a cent is merely the extra labor over and above the bench maintenance labor, and the one cent a thousand in the sixth section, which is water gas, covers both labor and material, as shown by the company's books. 36734

The Master: Have you divided that one cent into labor and material?

The Witness: Yes.

The Master: Well, what is the corresponding labor item?

The Witness: I have concluded it was half. I took those figures, and somewhat arbitrarily said one-half would ordinarily be labor, and half material. I gave them the total anyway. So it does not make any material difference.

Q. Does this $14,000 item for general maintenance labor cover as to plant "A" the same things which this $65,000 item covers as to plant "C"? 36735

A. One-half of the sixty-five—

Mr. O'Brien: He has explained that.

The Witness: The $65,000 is both labor and material.

The Master: And the $14,000 compares to thirty odd thousand, is that right?

The Witness: Yes, on totally different kinds of plant.

Q. The coal gas plant costs more?

A. In the retort house, yes; outside of the retort house it certainly does not.

36736 Archibald S. B. Little, Cross.

Q. Well, in this $65,000 you mention as labor, as to the C house, you found as to boilers and structures, purification, holders, miscellaneous, tools, and so on, certain items in the company's books, which you set forth?

A. That is right.

Q. Now, what as to the A and B house did you find were the corresponding items for structures, boilers, purification, holders, miscellaneous and tools?

A. On the company's books? I did not find it on the company's books.

36737 Q. Well, did you look for it?

A. I asked for it, and asked that an analysis be made.

Q. Of Mr. Sangster?

A. Yes, and it was not completed because of the difficulties that were attached to it, of getting vouchers, an enormous number of vouchers would have to be examined, your Honor, and it would involve a study of the—

Q. I am asking what the books—

Mr. O'Brien: He answered what the books showed.

The Master: Let him finish.

36738 The Witness: It would involve a study of whether you are charging all of those things correctly as to maintenance, repairs and depreciation, and I was very anxious to make such a study, but the time being absorbed I could not.

Q. Why did you take the book figure in one case and not in the other?

Mr. O'Brien: He has just told you about that.

Mr. Ransom: He has not told that.

Mr. O'Brien: Objected to as repetition.

Q. If the book figures as to the C plant were $65,000 and as to the A plant where coal was $91,000, why did you take the $65,000 for the C plant and make up a figure of $14,000 for the A plant.

A. Now, there are two questions. Shall I answer one of them, and then the other?

Q. All right.

A. In one case the book figures looked reasonable, and in the other case they did not, they looked somewhat high in both cases, but they were not so high in the second case, but that I felt I should use them. To the second question I would say I did not, that in one case the $65,000 is for both labor and materials and in the other case it is only for labor. You see, Judge, this $65,000 has got to be divided, making it just half of that. 36740

Q. You say $33,000?

A. About half of that, yes.

Q. Didn't you have to make just such an analysis, or just as much of an analysis about the $65,000, as you would have to about the A and B plant figures?

A. No. I say I accepted those and used them, as they did not appear very unreasonable.

Q. Now, page 2, Section 2, Item 25 of Sheet 2, Section 2 of Operating Costs, Boiler Fuel, your item or calculation based on producing three billion plus of gas in plant A, allows for 5,449 tons of coal?

A. Coke.

Q. Of boiler fuel? 36741

A. Yes, sir.

Q. That is about 3 1/2 pounds of boiler fuel per thousand cubic feet, isn't it?

A. It appears to be a little over three, yes.

Q. Didn't you testify in the Freeport case, pages 78 and 79, that you allowed 36 pounds of boiler fuel per thousand for coal gas?

A. No, 36 pounds of generator fuel.

Q. And 19 pounds per thousand for water gas?

A. No, I do not think so. That 3-pound figure seems to be low.

Q. Do you know of any plant in the country?

The Master: Mr. Little says 3 pounds seems to be low. What do you think it ought to be?

The Witness: Astoria ought to be about 7.

The Master: This is Plant A.

The Witness: No, I beg your pardon. I was thinking of the C plant.

The Master: This is Plant A we are talking about boiler fuel.

Q. And Astoria, shouldn't that be about 14?

A. No, not on the coal gas plant. I think you have

36743 got my testimony mixed up with bench fuel, Mr. Ransom.

The Master: You say now that Item 25, boiler fuel, which you figure about 3 pounds, is it?

The Witness: That figures a little over 3.

The Master: Is low?

The Witness: Is low, yes. About 4 1/2.

The Master: What ought it to be?

The Witness: About 4 1/2.

The Master: And you say they ought not to use more than 4 1/2 pounds of boiler fuel for the coal gas plant?

The Witness: That is right.

36744 Q. Well, do you know of any plant in this country that is operating on any such basis?

A. I have known of several. I do not know if I could give them right off now. I will look it up for you, Judge.

The Master: Give us the name of one.

Mr. Chambers: If he can.

The Master: If he can.

Mr. Chambers: Now.

The Master: Now.

The Witness: I could not give it to you now.

The Master: What is the plaintiff's proof as to that, how many pounds?

Mr. Ransom: 14 pounds.

The Master: Read the question again as to what the witness testified in the Freeport case.

(The question was repeated by the stenographer.)

Q. Well, you cannot name any plant?

The Master: You need not repeat that.

By the Master:

Q. Do you recall what you testified as to boiler fuel in the Freeport case?

A. No, sir, I do not. I certainly never testified to 36 or 14. 36746

Q. Well, you did not testify that it was 4 1/2, did you?

A. No, I do not suppose I did.

Q. What do you suppose you testified to?

A. I have no idea. I have testified in about 50 cases since, in the last few years.

Q. No idea at all what you probably testified to in the Freeport case?

A. No, sir.

Q. Well, you have a distinct idea that it was not 4 1/2?

A. It may have been 4 1/2.

Q. Well, you said a minute ago you were quite sure it was not as low as 4 1/2? 36747

A. I do not think I did, your Honor.

Mr. O'Brien: I must enter my objection to the Master conducting the cross-examination.

The Master: Read the first question I asked the witness, and his answer thereto.

(The question and answer referred to were read by the stenographer.)

By Mr. Ransom:

Q. Do you remember testifying on the subject of generator fuel, for the Peoples Gas case?

A. Yes, several times.

Q. And of giving figures as to the quantities used of generator coal by that company?

A. Yes, I do.

Q. The figure you give is the weighted average for January, 1919, generator coal, was 44.168 pounds.

A. Did I testify to that?

Q. That that was the weighted average?

A. I do not remember it.

Q. February—

A. I know I also testified that they had been down

36749 as low as 28.

Q. February 43.100 pounds?

A. 43.106?

Q. Yes.

A. I never remember any such figures.

By the Master:

Q. What do you say is the average generator fuel requirement in pounds?

A. It all depends on the fuel, depends on the quality of gas.

Q. Candle power?

A. It depends on the quality of the gas.

Q. 22 candle power gas, at the testing stations?

36750 A. With good fuel, from 30 to 32, possibly as low as 28.

Q. Well, 32 is not unreasonable?

A. Not at all.

Q. Coal gas I am talking about?

A. No, you are talking about generator fuel in water gas. He has got away from the Freeport.

By Mr. Ransom:

Q. You allow how much per thousand for miscellaneous expense, at Plant A?

A. $12,455.

Q. Or how much per thousand, 4 mills?

A. Yes.

Q. What items do you regard that as covering?

A. All the miscellaneous items that have no other place provided for in the classification.

Q. For what?

A. Oil and waste and things of that kind.

Q. Cleaning and removal of snow?

A. That is not material; that is labor.

Q. What do you call the miscellaneaus expense, is that merely material?

A. That is only materials, yes. 36752

The Master: Do you mind, Judge Ransom, if I break in with another question?

Mr. Ransom: No.

By the Master:

Q. What do you say ought to be the number of pounds required per thousand cubic feet of gas coal in the coal gas make?

A. You mean for boiler fuel?

Q. For the gas coal, in the making of coal gas?

A. I figure 5.5 feet from every pound of coal.

Q. Well, how many pounds, I want approximately, do you say it takes?

A. That is such an unusual way, I haven't got that 36753
figured out (figuring).

Mr. Ransom: Was that figure retort or coke oven process?

The Witness: That is in the inclined retorts.

Q. In the retorts?

A. Very nearly 1.82, a little over 1.82.

Q. That is assuming a quality of coal, and what you can get out of it?

A. Yes.

Q. That is soft coal?

A. Bituminous soft coal, yes, sir.

Q. Is that apt to vary?

A. Not very much.

Q. Will it run as high as 190?

A. Yes, it would where you have no retort house governor.

Q. Will it run as high as 200?

A. I have known it to run as high as that.

Q. Is that unusual?

A. It is unusual in a big plant that is operated well.

Q. Do you think 190 is nearer right?

A. No, I think 180 is nearer right in a big plant.

36755 Q. How about the boiler fuel, you would need how many pounds in the coal gas plant?

A. That is a figure I do not carry in my head as well as the other, your Honor, it is so seldom used.

Q. That is anthracite coal that is used for that, isn't it?

A. In this district, yes, or breeze, coke breeze is used in this district.

Q. Well, talking about anthracite coal, what would you need, somewhere around 10 pounds?

A. No, sir, you would not need half of that.

Q. Not half of it? A. No, sir.

Q. Well, how do you calculate that?

36756 A. Well, you calculate it on the number of heat units required to run a plant, converted into steam.

Q. Have you made a study of that?

A. Yes, sir, I have.

Q. I thought you said you did not have it in mind?

A. I do not have it in my mind.

Q. Well, how did you figure it now?

A. I figured it this way, on an average water gas runs about twice as much as coal gas, and water gas can be made and has been made in many plants with an expenditure of 7 pounds, 6 pounds of boiler fuel per thousand feet of gas made.

36757

Q. Oh, I see. Well, if you are wrong or I find you are wrong in your estimate of 7 pounds for water gas, then you are correspondingly low in your estimate of boiler coal for a coal gas plant?

A. I think, although it is slightly changed where you have waste heat boilers.

Q. So that if, as a matter of fact, it runs 14 pounds instead of 7, as you say, for the water gas, it would run 10 pounds instead of 5 for the coal gas plant?

A. Assuming those things, that would follow, yes, sir.

By Mr. Ransom:

36758

Q. With respect to Item 27 on page 2, Section 22, you said on Sheet 7 of this same section that you assumed that all of the electricity used would be purchased?

A. That is the way I figured it, yes.

Q. You understand, of course, that that is not the fact at Astoria?

A. Yes, I understand it is made over there. My statement was that if it cost more to make than you could buy it for, why, it would—

Q. (Interrupting.) Have you ever made a careful study of the Astoria power house and the uses to which power is put in Astoria?

36759

A. I have not made any careful examination of the power house itself. I have watched carefully the uses to which power is put.

Q. Are you aware of the fact that this power house supplies power not only into the retort house and the like, but also for all the coal and coke-handling apparatus on the premises, except the steam locomotives?

A. Yes, but I have covered that in the cost of handling coal, in the price of the coal itself. That is the way we usually figure it. Coal into stock ready for delivery to the retorts.

Q. Well, how did you figure this item of power and light, what was your basis of calculation?

A. The kilowatt hours that would be used.

Q. For what quantity?

A. And the City rate.

Q. For what quantity?

Mr. O'Brien: Judge, I wish you would give the witness a chance, you have got a lot of sentences here, answers that are not complete, it comes from your practice of interrupting.

Mr. Ransom: He says "city rate," and that is

36761 an answer.

Mr. O'Brien: No, we will go back over the record and there will be a dash at the end of many of his answers, due to the fact that you constantly jump in with another question, or an interruption.

Mr. Ransom: I said yesterday I have learned more bad habits in this case than during all the rest of my life, from you.

Mr. O'Brien: Well, I hope you have learned something you can turn to good use. I have tried to inculcate some lessons here, as I did in the Kings County case. I did not succeed much with Moran, and I do not know whether I am going to

36762 succeed with you.

Q. What quantity of electricity, Mr. Little?

A. I ought to have those figures here, but I am pretty sure I have not. I worked it out on the k. w. basis, and took the city rate.

Q. On the kilowatt capacity the company does use?

A. No. I took the machines that you used, and figured from that.

Q. That is, you took the kilowatt hours that you think the company ought to use?

A. That is about what it amounted to, yes. I hope I did not cut you down or anything like that, I did not try to.

Q. How could you have any idea of the number of kilowatt hours that was necessary for all the apparatus and the coal and coke-handling devices, and the like, in this plant?

A. I suppose I have figured similar things five or six hundred times, possibly more times.

Q. Where?

A. In Europe. It takes the same power to move a ton of coal there as it does here, electricity does not vary like man power.

Q. But your figures were made up on the basis of the number of kilowatt hours per ton of coal? 36764

A. Yes, examination of machines and motors.

Q. And how many kilowatt hours did you assume that this company ought to have?

A. As I said, I am sorry I cannot give you that now. I ought to have those figures here, but I have not.

Q. How much of the total number of kilowatt hours used for coal and coke-handling apparatus, and how much for the retort houses?

A. My memory is about half and half.

Q. Well, will you bring those detail figures this afternoon?

A. I will try to get them, yes. 36765

Q. The size of the charge is affected by the condition of coal, so far as whether it is wet or dry, and the size of coal?

A. Not by the size.

Q. Not with the size?

A. No, not much, hardly appreciably. By the moisture, free moisture, it might be, or would be.

Q. That is you cannot put in the required quantity of coal for an 8-hour charge when it is wet?

A. You could put it in, but you would soon get your heat down.

Q. But you say the fact that coal may be a small size does not affect it?

A. No, very, very little.

Q. Well, now, uneven charges, or small charges, if they become necessary, have an unfavorable effect not only on the operation of the bench, but on the operation of the whole plant?

A. Small charges, yes, they are out of date.

Q. And uneven charges?

A. Uneven charges are worse than small charges.

Q. Now, as to Item 12, Sheet 2, are you familiar
36767 with the coke conveyor, for which you here provide one mechanic?

A. Yes, I have seen it.

Q. Have you ever watched it operate over any period of time? A. Yes, several times.

Q. Do you know that in a breakdown of this coke conveyor it is often necessary to use 5-ton chain hoists to bring the parts together?

A. I would not be astonished. That is what you would expect. It is a long length of chain.

Q. Well, do you mean to convey the impression by this item that one man can make the necessary emergency repairs to a coke conveyor of this size and ca-
36768 pacity?

A. No. That is operating, it is not repair. That is operating, it is not repair. That is just keeping the wheels in alignment, seeing that everything is going right, just to attend to it.

Q. Where is your allowance for repairmen for the coke conveyor?

A. That is in that miscellaneous labor item that we have just finished with, that $12,500 and the $2,000.

Q. Well, now, will you give us an analysis of just what is in that $12,500, have you got it?

A. No, I have not got it.

Q. Did you ever make it up?

A. No, I did not make it up that way. I could.

Q. Will you?

A. I will try.

Q. Now, you allow—

By the Master:

Q. What is that $12,000 a year?

A. $14,500 a year.

Q. How much of that would you now say you allowed for repairing this conveyor.

A. Labor about a thousand dollars.

Q. How many men? 36770

A. That is a little hard to figure that way, your Honor.

Q. Well, you say a thousand dollars, you have to give me some basis for it, how many men and how long and how often?

A. Well, suppose there were three break downs a year (figuring) it would be about 66-man days per year, one man 66 days or 6 men 12 days.

Q. To make up your thousand dollars? A. Yes, sir.

By Mr. Ransom:

Q. How many conveyors in the A house alone?

A. Coke conveyors? 36771

Q. Yes.

A. Two. That is one line divided into two. It goes out each end. I will change that. To each side. There are four in the retort house, delivering coke to each end, that might easily be two if you had it in one length.

Q. Isn't it a fact there are ten in that A house?

A. Coke conveyors?

Q. Yes.

A. No.

Q. Including the conveyors on the outside, one at each end?

A. That is not in the retort house.

The Master: Well, then, there are eight, without the two on the outside?

The Witness: No, there are four in the inclined house.

The Master: And you say it costs a thousand dollars a year to repair them, for labor on them?

The Witness: Yes.

Mr. Ransom: Mr. Woods says there are eight.

30773 The Master: The witness says there are four and I will take the witness's statement.

Mr. O'Brien: We are lapsing into quite an informal way of conducting this, with about eight of the employees of the Gas Company here talking in the presence of the Master and giving their ideas, and Ransom then summing it up by saying Woods says and so.

The Master: Well, Mr. Little, according to your recollection there are four conveyors, as I understand your testimony?

Mr. O'Brien: I suggest he work out the detail of that.

30774 The Master: Do I understand your testimony to be you could keep those four conveyors in repair for a thousand dollars a year, labor?

The Witness: For labor only, yes, sir.

Q. Is your recollection clear about there being only four?

A. I am almost positive about it. You could not put in eight, you would have to go sideways.

The Master: Putting it another way, would you say it would cost about $250 for each conveyor that is in there, to keep it in repair a year?

The Witness: For labor, yes, outside of the work that the man could do who is running it.

The Master: I mean in case of breakdowns.

The Witness: Yes, sir.

The Master: $250 to take care of all the labor expense on each conveyor?

The Witness: Yes, sir.

Q. That would be how many breakdowns a year?

The Master: Three.

Q. Three breakdowns a year?

A. Yes, sir, three breakdowns a year. Of course that is an offhand judgment, you asked me to give.

By the Master:

Q. Did you ever have anything to do with a plant 36776
that had conveyors of this kind?

A. I have designed and built and put in the biggest coke plant in the world, and I designed and built more coke plants than everybody else put together.

Q. Have you operated these conveyors?

A. Yes, I have.

Q. In a plant of this kind?

A. In a plant of this kind.

Q. And how often did you find them breakdown?

A. Well, my testimony is based upon what I found.

Q. You think about three times a year is all they ought to break down?

A. Yes. 36777

Q. And how long does it take to repair it each time?

A. Well, it is usually a matter of hours, because you can't keep a coke conveyor out of action very long; you have spare parts to slip in.

Q. How many men do you put on?

A. About four or five.

Q. How much do you figure paying them an hour?

A. Why $5 a day.

Q. For how many hours?

A. Eight hours a day.

Q. What are they, mechanics?

A. Well, there is one mechanic, and there is three or four helpers.

Q. You would not get the head mechanic for $5 a day?

A. No, but the average would be around $5.

Q. How low would the others go?

A. $4.

By Mr. Ransom:

Q. How long did you operate any such plant?

A. I have had to give guarantees on them when I put them in.

36779 Q. I say how long did you operate any such plant?

A. I have had charge of the operation of such a plant for a year at a time.

Q. When?

A. In other words, I was responsible for it being maintained for a year, sometimes for two years.

Q. You were there on the job in charge of operation?

A. No, but I had the responsibility for keeping them in repair, if they fell down I had to make good out of my own pocket.

Q. Was that in this country?

A. No.

36780 Q. These were brand new plants?

A. Yes, naturally, when they were put in. I kept figures on all those things.

Q. What you mean is, that you sold under a two years' guarantee?

A. Yes, sometimes two.

Q. And didn't the concern for which you did this go into bankruptcy, or fail?

A. It certainly did not.

By the Master:

Q. Let me ask you this.

A. (Interrupting.) They paid a hundred per cent in one year.

Q. You guaranteed it for a year and sometimes two years?

A. Sometimes two.

Q. That would indicate the period of time that you felt that you wanted to be responsible as a manufacturer for them?

Q. Well, we could not have a continuing liability, your Honor, on the company's books.

Q. But after the second or third year do they get out of repair often, break down more often?

A. No, not the way they are built; they are built in sections, so that when you make a repair it can be 36782
made in sections, just like replacing ties on a railroad.

Q. But any section will break when it is old, the breaks are more frequent, as times goes on?

A. I think they may be.

Q. When you say three times a year, do you mean during the first year or second year of the life?

A. Yes.

Q. After that?

A. The first year they may not break down at all.

Q. Well, say after they are five or six years old, won't they break down more often?

A. Yes, there are hills and dales, like in other things, they would run along for a year without a single break- 36783
down.

By Mr. Ransom:

Q. Was this the New Conveyor Company you are speaking of?

A. Yes, sir.

Mr. Chambers: Paid 100 per cent, did it?

The Witness: They paid that two years running.

Recess until 2 o'clock P. M.

36784 Archibald S. B. Little, Cross.

Afternoon session.

ARCHIBALD S. B. LITTLE resumed:

CROSS-EXAMINATION CONTINUED BY MR. RANSOM:

Q. On one of the matters we were talking about this morning, I called your attention, Mr. Little, to the Annual Report of the New Amsterdam Gas Company to the Commission for the year 1913. That gives the candle power station test, Ravenswood, page 67 of the report, as 29.54, does it not?

Mr. O'Brien: I object to that as incompetent,
36785 irrelevant and immaterial.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. Line 17, on page 67 shows candle power station test 29.54.

Q. Ravenswood?

A. Ravenswood, yes.

Q. In this Plant A, Mr. Little, in addition to the conveyors there are two bucket elevators?

A. Yes.

Q. You provide elevator helpers, make allowance for paying elevator helpers in your table of production costs, Section 2, Sheet 2, for three shifts?

36786 A. No, not on the mechanics.

Q. On the helpers?

A. Three shifts it should be; I think I did.

Q. You have allowed, as it appears on Sheet 5, one man in each of three shifts, Item 13?

A. Yes.

Q. You have provided for the mechanic on the coke elevator only two shifts?

A. Two shifts, yes.

Q. Was it your judgment that that this elevator could be counted on to run at least one shift in the day without requiring adjustment or repairs by an expert mechanic?

A. Not the repairs, but just the overseeing, yes.

Q. You would not have any expert mechanic on the job during one shift?

A. On one shift, yes.

Q. Which shift would you leave it without a mechanic?

A. Well, the darkest hour shift, commonly known as the third shift of the day. Leave one man there all the time for greasing, etc., the helper, but the two mechanics were supposed to be working over the daylight hours, because they can get a better idea of how the machine is running then.

36788

Q. Have you observed the operation of this elevator?

A. Not closely enough, I would say, to say that there were three all the time. I was never there over three consecutive shifts.

Q. Is it not a fact that in addition to the men that you have allowed this apparatus has and requires the constant service of one man in each shift for each of the two elevators, simply to attend to the actual operation of the same?

A. I don't know that to be the fact.

Q. Wouldn't it be your judgment that that was true as to an elevator of this kind?

36789

Mr. O'Brien: It is just the contrary, his testimony is to the contrary.

Mr. Ransom: No, he said he didn't know that.

A. No, I think one would be enough.

Q. That is one man for both elevators?

A. Yes.

Q. So if they have two you would regard it as unnecessary?

A. Yes.

Q. Where, in your tables of cost, have you made any allowance for drivers, carts and teams, to remove ashes from the retort house to the dump?

A. I have not allowed for any carts and wagons, but in item 11 and item 14, the combined crews there would take care of the removal of the ashes.

The Master: What is item 11?

The Witness: Ash pit men.

Q. And flue cleaners?

A. The other flue cleaners.

The Master: Where are your carts?

36791 The Witness: That would be wheelbarrow work I should say.

Q. You would handle ashes in a plant like Ast— I am going to object to this repetition. He gave you the answer.

from the retort house to the dump by wheelbarrows, and have your flue cleaners do it?

A. No, the ash pit men.

Q. Have your ash pit men do it?

A. Yes, they would put it in a convenient place.

Q. Is it not a fact that for a 10,000,000 make the drivers, carts and teams for the removal of ashes from the retort house to the dump at any practicable

36792 place where it could be put, would require two carts and drivers constantly on the day shift?

Mr. O'Brien: I object to that as involving a speculation, nothing in the proof—

The Master: Objection overruled.

Mr. O'Brien: As vague also, "any practicable place."

The Master: Objection overruled.

A. No, I would think that was excessive.

Q. How far do you figure that ashes of this sort have to be removed, that is, how far would they have to be carted by wheelbarrows or wagons?

A. The ash pit men would place them outside of the retort house, and some other time the mainten-

ance and repair men would come around and clean up, take away the ashes. In some places you can get a very good price on ashes for filling in.

Q. So your idea would be that a wheelbarrow should take them outside of the retort house, and then repair and maintenance men should take them away in carts?

A. Yes, or the general casual men around the plant. For instance, on No. 5, you see the helpers on the coal pile would not be employed constantly, and it is stated there that they would be used for casual labor around the plant. 36794

The Master: I would not spend any more time on that.

Q. How many helpers have you got on the coal pile per shift?

A. Two men to a shift.

Q. On a 200,000 ton coal pile?

A. You haven't a 200,000 ton coal pile. That is just the helpers, that is not the men handling the coal, that is, trimmers.

The Master: We have had enough of ashes I think, Judge Ransom.

Mr. O'Brien: We didn't see any the day we were over there. 36795

The Master: Because they carted them away.

Mr. O'Brien: I mean the men, except when that dinner bell rang and they came out to lunch, the men were about as scarce as on the veranda of a summer hotel.

Mr. Vilas: They were moving so fast you couldn't see them.

Q. What allowance have you made in your table for labor for the dumping of the carts of breeze brought from the coke bins to the boiler house?

A. That is figured in a little different way. I

36796 Archibald S. B. Little, Cross.

have allowed so many boiler men and I have also allowed 25 cents a ton for handling the breeze between the two places. That goes in the cost of the material.

Q. How many men do it?

A. I don't know; 25 cents a ton is what I figured it.

Q. How did you figure it?

A. I admit that that is about twice as much as you ought to spend.

The Master: How do you figure what they
36797 ought to spend?

The Witness: I know the number of tons handled per year, I know the number I assume handled per year, and knowing the price of labor over there.

Q. Well, how many men?

A. I can't figure that out now.

Mr. O'Brien: Take your time, Mr. Little, and figure it out. Give him all the detail he asks for.

A. That figures one man all the year round, three shifts, on the A plant.

Q. That is, you mean you would have a man on each shift?

36798 A. A man on each shift for the A plant hauling breeze all the time to the boiler house.

Q. Have you made provision for a licensed engineer in the boiler house on each of the three shifts?

A. Yes, I have allowed that. You would have to take that into account as a combination of a boiler house for three units, that is boiler supervision for the three plants. In other words, I have got boiler men on the water gas house and on the A house and on the B house.

Q. Will you show me how you have made provision for a licensed engineer in the boiler house on each of the three shifts as to the A plant?

A. On the A plant?

Q. Yes.

A. It is a proportion—I have assigned a certain proportion of the boiler house labor to Plant A. For instance, look at Section 4, Sheet 4, the main part of the boiler house is set forth.

Q. I am looking on this schedule of production costs on plant A in your Section 2?

A. There is no particular licensed engineer for that particular Plant A. You have got to assume the boiler house as a unit.

Q. How many boiler houses are there for the A and 36800
B Plant?

A. My recollection is one boiler house.

Q. That is one boiler house for the A and B plants?

A. Yes.

Q. And one for the water gas?

A. That is my understanding.

Q. And one for the power house?

A. Yes, but the power house I have treated in a slightly different way, as I testified this morning.

Q. Where is your provision for a licensed engineer for the coal gas boiler house? Is it there, where is your provision?

A. It is not there, it is in the water gas boiler 36801
house.

Q. Then you have made no provision for licensed engineer for the coal gas boiler house?

A. That can be stated that way, yes, not on this separate set-up.

Q. Or on any set-up?

Mr. O'Brien: Yes, he has answered that. I am going to object to this repetition. He gave you the answer.

Q. Show me where—

36802 Archibald S. B. Little, Cross.

Mr. O'Brien: That is three times you have asked him that.

The Master: I understand, Judge Ransom, the witness to testify that he has not made provision on plant A—

Mr. Ransom: Or B—

The Master: Or B, for licensed engineers, or whatever they call them.

Q. Are you familiar with the fact that by municipal ordinance licensed engineers are required in each such boiler house constantly, each shift that it

36803 is run?

A. Not whether that is particularly so in New York; it is a usual provision in big cities.

Q. In your table of labor costs have you taken into account the fact that the Astoria Company pays time and a half for overtime, and time and a half for Sundays and holidays?

A. Yes.

Q. Just show how that is computed here?

A. I haven't got any overtime, I have enough men per day to take care of the needs.

Q. How about Sundays and holidays?

A. I endeavored in that respect to use at least as

36804 much or more per man day as Mr. Woods used in his testimony for the different classes of labor.

Q. How much do you say?

A. Well, a general foreman, for instance, $7.78 a day; locomotive man, $5.01.

Q. Is that figure for Sunday work?

A. No, that is the average for all days in the year.

Q. What would you figure that his salary or wages would be without the inclusion of an allowance for Sundays, holidays and overtime work?

A. Abut $7.50 a day.

Q. How else, with respect to the great mass of laborers, have you made provision for the necessary payment of time and a half for Sundays and holidays?

Mr. O'Brien: I object to that as assuming something that is not in the record of this case.

The Master: Objection overruled.

A. I think I can only answer that by stating that I took approximately the figures or higher figures than Mr. Woods stated he paid and has used in his tables. In some cases I took considerably higher than he figured. 36806

Q. But much fewer men?

A. Fewer men per thousand cubic feet.

Q. Because of the larger make?

A. Yes, sir.

The Master: Is that the only change you have made, substantially, by providing a larger make you get a smaller cost per unit per thousand cubic feet?

The Witness: Yes, sir.

The Master: That is about all you have done?

The Witness: That is what I have tried to do, yes.

The Master: How much less have you made it than Mr. Woods? 36807

The Witness: I really cannot tell you right off, your Honor. I did not take his figures and work to that as a base, because he only had a ten million plant, and there isn't any such thing in the city.

Q. How many general foremen did you allow, item 2, page 2?

A. One in each of two eight-hour shifts on plant "A."

Q. What did you do about the third shift? Can

it take care of itself without any foremen of any kind?

A. That is usually the way it is done, yes.

By the Master:

Q. Where?

A. In most plants, your Honor, the foremen are paid by the year, and they are supposed to be there day and night if they need them. A foreman is looking for prospects as much as for present salary.

Q. Do you know what the rule is in New York among that class of help?

36809 Mr. O'Brien: What are you talking about now, gas plants, or generally?

Q. Foremen, that grade of help.

A. In gas works I would say.

Q. No, factories, generally.

A. No.

Q. Do you know what it is in gas works around New York?

A. My understanding is that it is pretty much the same as in other places.

Q. How did you get that understanding?

A. By knowing the actual men that have done the work, and having spoken to them.

36810 Q. In what plants?

A. I don't know what particular plants.

Q. When?

A. Some years ago.

The Master: Next question.

By Mr. Ransom:

Q. That is, you think that what you call the dark-hour shift should be left without a foreman?

A. Without a general foreman.

Q. And the other shift should have one general foreman on duty, each shift?

A. Yes.

Q. In allowing but one foreman on duty have you taken into consideration that there is a coal-handling gang at the north docks, another gang of men handling coke, both some distance from the points where other operations are carried on?

A. That is taken care of in a different way by taking the cost of handling the fuel and adding that to the cost of the fuel itself before I put the fuel into the retorts.

Q. You haven't provided any subforemen?

A. I have provided for all the charges for handling coal in the material cost of the coal, and handling the 36812
coke, too. That is set up, perhaps, in a different way from what you are looking at. I have figured the cost of the coal in the retorts at so much. That is not the cost of the coal delivered, it is the cost of the coal plus all the handling charges.

Q. These coal charges that you have given include all handling charges?

A. Yes.

Q. Coal in the retorts?

A. No, up to the coal pile, in stock, ready for the locomotive men to come along and pick it up.

Q. How about the coal-handling gang at the docks, and the coke-handling gang? Would you leave them 36813
wholly without any foremen, or would you have only one foreman for the whole thing?

A. No, if you do it that way, that is the way it has been done, because I have given you all the charges for handling coal that you have put into your books. The figure is in the cost of the coal. It does not show separately in these tables as a labor item.

Q. But you have not put in the number of men which this company has as foremen and subforemen?

A. Well, for handling coal I certainly have if they are in there, if you have put them in the cost of

handling coal, as required by your classification, I have got them in, because I have used your figures.

Q. You haven't any foreman of masons on your table?

A. No, not a separate foreman of masons.

Q. Or any foreman of electricians?

A. You say you buy the power, and you would not have a foreman.

Q. Any foreman of carpenters?

A. Only where it would come in as part of the maintenance cost.

36815 Q. Any foreman of blacksmiths?

A. No, that would also be part of the maintenance cost.

Q. Didn't you find that the company had all these?

A. I found this when I began to look into the tables, that you had more men maintaining the plant than operating it. That is why I set it up as I did, in order to try to find a fair basis.

Q. Even if you purchase this amount of current, would you still have to have electricians to look after the wires and the electrical apparatus in the plant?

A. This part of the maintenance which I have not set out in detail as to the number of men. I would

36816 say, your Honor, I was asked to get certain data in the lunch hour, and I did not have time. I made an earnest effort to locate it.

Q. That is this item of $14,000, you could not get the detail of that?

A. That is it, yes, sir. There were two things I was to get, the power and the maintenance. I had very little time in that hour.

Q. With respect to the present conditions of labor as they exist in New York City, if you are familiar with that, isn't it considered good practice to have a foreman over a gang as small as six men?

A. You would have a straw boss, I suppose.

The Master: What is that, a straw boss?

The Witness: Yes.

The Master: Don't you know that you have got to have them around here?

The Witness: Yes.

The Master: I have seen two men with two or three foremen.

The Witness: So have I.

The Master: The labor unions apparently are insisting on it now-a-days.

Mr. O'Brien: And they have a foreman of counsel here.

36818

The Master: Then a shop steward, and a couple more assistants.

Mr. Chambers: The gas case has to have a foreman.

Q. Don't you have to have a foreman of track gangs?

A. If you have a track gang you have to have a foreman, yes, sir.

Mr. O'Brien: Did you read my brief in the Kings County case, where I set up the pay roll of the works? Did you read the list of the men?

The Master: I didn't analyze it, I read it.

Mr. O'Brien: I ask that, for I take it, now and then, bringing in your experience with other factories, that you are forgetting the fact that gas plants and gas labor is in a class by itself; that is, they have not been unionized, and wages have not taken the jumps that they have with other classes of employes.

36819

The Master: One thing is sure, Mr. O'Brien, and that is this, that so far as this witness asserts that this company could get along without certain foremen, or without certain labor—I am trying to differentiate as between his contention

36820

about making a larger amount of gas, and the rate, the amount per thousand cubic feet—you will have a good deal of difficulty in satisfying me that the officers of this company are not using their best judgment.

Mr. O'Brien: I want to say to your Honor that you haven't any proof—

Mr. Ransom: He has cut our labor force worse than to the bone.

Mr. Chambers: No, he has not.

Mr. Ransom: You couldn't run half the plant on his labor force.

36821

Mr. O'Brien: I want to say right here, not to carry on a lengthy discussion, because this is not the time for it, but so you will know what is in my mind, that there isn't any proof in this case as to the details of the running of the Astoria plant.

Mr. Chambers: Or any other plant.

Mr. O'Brien: That all we have got here is the witness Woods' statement as to how many men and how much material he would have in that Utopian plant of 10,000,000,000.

Mr. Ransom: They put the full operating figures of Astoria in.

36822

Mr. O'Brien: He didn't locate it in any particular place, he didn't have the ash heap in a particular place, he didn't have any of the details worked out, and all he gave you was just so many little items of cents per thousand cubic feet. You didn't get a diagram of it, you didn't get a detail of it.

The Master: I got a pretty good diagram when you put in evidence the books of the Astoria Company.

Q. Have you observed in any great detail the nature of the work required of the helpers on the coal pile?

A. Not in any great detail.

Q. I notice from page 4 of this section, item 5, your allowances of helpers on coal pile is two men to a shift, two shifts a day, eight hour shifts, for trimming the pile, cleaning up, moving cars if necessary, and they also perform the casual labor for the coal handling plant?

A. That is just a part of them for plant A, and there are some more on plant B. It was assumed, of 36824
course, that the elevator, the crane, would do the bulk of the work.

Q. How many men do you allow to the coal pile in plant B?

A. The same number I believe. I can look it up. Yes, the same number as on plant A.

Q. These cars that you speak about moving are standard gauge railroad cars weighing about 30,000 pounds?

A. Yes. You have a locomotive there, of course, to handle them.

Q. You provide for only one man in the locomotive? 36825

A. Yes.

Q. No fireman?

A. There again it is divided between the two plants. You have one on each, and you divide the two men. The one crew I have divided, one to each plant. You cannot run the two plants as separate units. The locomotive will handle all of the cars, and I have one man on each plant, one a locomotive man and the other a fireman.

Q. How many men to a shift from each plant to the locomotive?

A. There are four men altogether to a shift.

Q. That is four men to a shift?

A. On the locomotives.

Q. Making a total per shift of four men?

A. Yes.

Q. Are you aware that three locomotives are operated at Astoria?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial.

A. One is for coke—more than one is for coke. That is only for handling the coal.

368827 Q. How many men do you consider it necessary to have to trim a 200,000 pound coal pile?

A. I don't think it is necessary to have any except to keep the tracks clear for the locomotives. The crane, if it is properly designed, will do that.

Q. What do you mean by the word "spares" in item 4, conveyor men?

A. That is a typographical error. It should be "spaces." I called attention to that in some corrections that I asked might be made in the testimony.

Q. Do you know that coal in the Astoria yard is used in about 50-ton cars?

A. That seems to me to be bigger than I thought.

368828 Q. How much do you say they are?

Mr. Chambers: I object to that as incompetent, asking him to guess how large a coal car is used.

A. About 36,000 pounds if I remember.

Q. They are all the same size?

A. I believe they are; it would not make much difference if they were not.

Q. Have you made any provision for the labor for the dumping of these cars into the hoppers, or do you expect the casual coal pile helpers to attend to this?

A. That would be a combination of item 4 and item 6.

Q. That is, you would have these cars dumped, these 50,000, or as you say they are 36,000 pound cars, dumped by the weighers and the conveyor men?

A. Yes.

Q. Have you made any allowance in your labor figures for the men on coal elevators, coal crushers, conveyors and feeders?

A. That comes in the conveyor men, Section 4.

Q. And all of those functions are embraced within your four conveyor men?

A. Yes.

Q. That is, you have two conveyor men per shift, in 36830
two shifts?

A. On each plant.

Q. Now, with respect to item 9, helpers for quenching—you furnish only two men on a shift to quench coke from eight batteries. It is quite possible, is it not, that all eight batteries may discharge coke into their respective conveyors at the same time?

A. It is possible, but it is not very probable.

Q. That may happen in the course of operation?

A. No, it would be very bad practice if it did happen. All that work is arranged automatically. A man stands there with the valve, and when they begin drawing the retorts he turns the valve on and he 36831
can direct the water to any place he wants to in the conveyor trough. You could do away with this man if you wanted to by putting in a still more automatic system which I have used, in which the coke itself raises up an arm and turns on the water.

Q. If the batteries do not discharge simultaneously at what time would you repair coke elevators, coke conveyors?

A. I don't quite get that.

Q. If the discharging is not simultaneous you have got to have your elevators in continuous operation, haven't you?

A. No. I stood over at Astoria for nearly an hour waiting to see some of the inclines discharge, and there were no inclines that came off in that time, and all the benches, as I remember it, were operating at that time.

Q. Well, at some other time all eight batteries may have discharged simultaneously?

A. Then it is bad practice.

Q. And you have only two quenchers?

A. Two quenchers is plenty.

Q. You don't consider one hour's observation a

36833 test of operations?

A. One hour's operation, when are watching to see something and it doesn't happen. I was drawing attention to that point, that there was an hour in the retort house where there was no retort discharged.

Q. On page 6, Section 2, your item 19, you have included the services of two men on two shifts to keep the gas exhausting machinery, condensers, washers, scrubbers, etc., in good operating condition and doing the recording of temperatures. Who will do this on the third shift?

A. That is a mistake. I ought to have another gang there, two more men on the plant.

36834 Q. Now, isn't it also necessary to have at least one man per shift in the condenser and washer house to oil and care for washer engines and equipment?

A. No.

Q. You would not think it was necessary?

A. No.

Q. Who would do it?

A. Well, that is an operation that requires very little—it doesn't need anything.

Q. Who would you have do it in this operation?

Mr. Chambers: Just a minute, let him explain. Finish your answer.

Q. If you were operating instead of Mr. Woods and his assistants?

Mr. Chambers: You hadn't finished your answer.

The Master: He will finish it now. Don't you worry about that.

A. I believe you have to take into consideration the manner in which I have set up my figures, so many men for each plant, and take into account that when you combine all three plants all in one operation that there are more men for looking after condensers and exhauster and meters, etc., than is really required. 36836
It is awful hard to set up one plant with three units in such a way that you can show every man on every plant and on every operation in the plant in the manner I have attemped to do. I don't think anybody has ever set up a statement in such detail as this before.

Q. You say no one has ever set up a statement on such a basis?

A. In such detail.

Mr. Chambers: Woods did not, for one.

Q. In the assignment and distribution of your labor on the pay roll you have to allocate men to these different functions? 36837

A. Certainly.

Q. Do you regard it as good operation not to have anybody in the exhauster house?

A. I have already stated that that was a mistake. For one shift there you need a man in charge.

Q. I didn't mention the exhauster house?

A. You mentioned item 19, as I understood it, exhauster and machine men. That is what we were talking of.

Q. That item 21, Sheet No. 4, for retorts, as to coal handling costs, you state that no more labor is

used with greater tonnage. Is it not true that if several boats arrive at a dock at the same time, coal cannot be carried directly from the boat to the retort house, but must be stored, necessitating the handling of the same coal three times.

Mr. O'Brien: I make the same objection.

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. Twice, wouldn't it be, if you have such conditions. It would be handled out of the boat to the pile and out of the pile into the retort house. If you
368?9 have those conditions I have allowed for it, because I have used your price although I have made a comment that I think it was higher than it could be, still, I have put in your price.

Q. We will come a little later to the question of the prices you have used. Have you observed the Astoria conditions as to what takes place when several boats are being unloaded at the same time?

A. No, that condition was not apparent at any time I have been there.

Q. Did you know that the large coal bridge is frequently engaged in both sorting the coal and in shifting the coal pile from one part of the yard to
368?0 a more accessible part?

A. That is some of the trimming to which you have referred.

The Master: Well, that would make the third handling, then from the bridge to the coal pile, from the coal pile to some other place, and from that some other place to the retort house?

The Witness: Yes, finally there would be the three handlings, but I cannot understand why that should be.

The Master: I am assuming the conditions that Judge Ransom has referred to.

Q. In this Section 2 of your schedule of labor force which you have made out, which you think you could operate the plant on, can you tell the Master by what number of men and in what instance you have cut down the labor force which the company thinks it ought to have for proper operation of that plant?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial.

The Master: I was just going to ask Judge Ransom whether his question did not relate more directly to what the company had actually done, rather than what they thought ought to be done. 36842

Mr. Ransom: My next question would have related to the labor force that they have been able to get, because the company has been enormously short during the recent period, and this witness in addition to running up the output has reduced enormously the labor force.

Mr. Chambers: Why not send over one or two counsel and put them to work?

(Question read.)

Mr. O'Brien: I submit that the statement made here in detail, which is in the record, gives that data.

The Master: I have ruled the question in and allowed you an exception. Answer it. 36843

A. I have not made up such a table that would show the information that you ask for. The conditions are different—

Mr. O'Brien: You want tables to show a comparative set-up, do you?

Mr. Ransom: Don't be afraid of your witness.

Mr. O'Brien: I am not afraid of anybody or anything.

Q. Can you tell the Master by what number of men you have in your hypothetical calculation here, as to

what you think you could do, operating this plant, can you tell the Master how much you have reduced the labor force which the company actually has or has had at any of the times that you have either visited the plant or examined their labor figures?

Mr. Chambers: I object to that on the ground that it does not appear yet that he has cut down the labor force.

The Master: Don't you think so? Let me read you something.

Mr. Chambers: In detail—he worked it out

36847 in a different way.

The Master: Let me read you something if I can locate it quickly. "As to prices I have varied, but I have not taken exactly what they have. I have set-up based on my experience in similar plants about the number of men they would need."

Mr. O'Brien: Where does it appear in detail the number that they have?

The Master: That is a different question. It appears from the books that Mr. O'Brien offered in evidence how many men they have, and whom they pay.

36846 Mr. O'Brien: Your Honor has not analyzed those books.

The Master: I saw the covers. I am assuming that there are entries in the books—

Mr. O'Brien: They are not proven.

The Master: Didn't you offer them?

Mr. O'Brien: That doesn't prove them.

The Master: Are you challenging your own exhibits?

Mr. Chambers: Yes, certainly. I take an exception.

Mr. O'Brien: The books were offered as admissions against interest for a limited purpose.

36847

and they are, of course, received for a limited purpose.

The Master: They certainly show the items that are in there.

Mr. O'Brien: The books that came in and were offered by the complainant in this case have not binding force.

The Master: It seems to me I have heard that argument before.

Mr. O'Brien: You have heard it, and you are going to hear it again.

The Master: Objection overruled.

Mr. O'Brien: Exception.

36848

Mr. Ransom: The defendants also offered in evidence the annual reports of the Astoria Company which show the number and the wages of the different kinds of employes.

Mr. Chambers: As admissions against interest. They were not offered as proof of the fact therein stated, or rather, the matters therein stated were not facts.

Mr. O'Brien: I repeat my objection that counsel is asking the witness to give them a table, or set up a comparative statement of the number of men that he would suggest as being sufficient to run this plant.

36849

The Master: That he has.

Mr. O'Brien: And the number that the company has.

The Master: The question is allowed.

Mr. O'Brien: There is nothing in evidence that shows how many the company has.

The Master: The question is allowed. Mr. Little has had the books, he has had the figures, he has said that he set up the cost of labor as Mr. Wood has given it.

Mr. O'Brien: It would take some time to work out that kind of a table.

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The Master: Let us have an answer to the question.

Mr. O'Brien: Exception.

(Question read.)

A. No, I never had such a table, because it was not my intention to go in and take what they had and pare it and reduce it. It was not done that way. It was set up quite independently.

Q. Have you examined the annual report of the Atlantic Company to the Commission put in evidence by the defendants here showing the number of employes
36851 of the different kinds and their rates of pay?

A. No, I have not seen that particular table. I have seen the 1918 report, but it was a copy, I believe, and did not have that information in it.

Q. So you cannot tell how many less men your schedule has that the company uses for a less out-put than you assumed?

Mr. Chambers: I object to that on the ground that he has already stated that he did not compare man for man, his way of working this out with the way the company is doing it. This is repetition and a waste of time.

The Master: I will allow the question.

36852 Mr. Chambers: Exception.

A. That seems to be the same question, and I would have to give you the same answer, that I cannot. I could if I was given time, but I haven't such a table here.

Mr. O'Brien: We will let Judge Ransom work that out himself in his brief.

The Master: What brief?

Mr. Chambers: There isn't going to be any brief.

Mr. O'Brien: Before the United States Supreme Court.

Q. Now, turning to your water gas figures, Section 6—

Mr. O'Brien: Weren't we in the water gas plant before?

Mr. Vilas: We stepped in once or twice.

Q. Items 5 and 6, Section 6, Sheet 4, here again you have allowed general foreman for only two of the three shifts?

A. Yes.

Q. The same is true of Item 8, what you call cadet engineers to assist the superintendents, you have them on only two shifts? 36854

A. Yes, and you haven't them on any.

Q. Section 7, Sheet 5, which is 21st Street water gas, you have allowed four men for only two shifts?

A. Two foremen on each of two shifts in each plant whether they are running or not. I look upon foremen as almost the same as Mr. Woods. You don't have a general superintendent for each shift, he is absent a day and night, I suppose, sometimes. Foremen have got to take their chances along with the other men.

Q. Take this instance, according to the proof in this case, at 21st Street they have three general foremen, and three generator house foremen. You only 36855 allow one foreman for each of two shifts?

A. That would be classed as supervision, I will take it, and I have allowed you just what you show on your books for supervision. There might be some in there in addition to the foremen I have, although I would not be able to state that positively.

Q. You would not call generator house foremen, subforemen, and so on, supervision, would you?

A. I have known it called that in other plants; I would not say that it is here.

Q. But it is a fact that in making up your statement of the number of men you have allowed only one foreman for each of two shifts?

A. General foremen, yes.

Q. Where the company now has a general foreman on each shift, and a generator house foreman on each shift.

Mr. O'Brien: Just a minute, the same old error is being made by Judge Ransom in repeatedly ringing in to his questions assumptions that are not in the evidence.

36857 The Master: Well, they don't prove anything.

Mr. Ransom: It was testified to.

Mr. O'Brien: There is nothing here about 21st Street.

Mr. Ransom: There was in Mr. Woods' testimony.

Mr. O'Brien: He was in Utopia, his was an imaginary plant not of the capacity of this plant, 10,000,000,000, an imaginary plant built nowhere.

Q. What is your answer, Mr. Little?

A. I might point to Item 2 of boiler house labor, for instance. There is a foreman in there if you
36858 have foremen included, because I have taken your own figures. One generator house foreman, that is fully set up, every man I have allowed, in Item 3.

Q. You have general foremen on only two shifts?

A. That is right.

Q. And generator house foremen on no shifts?

A. I have not set it up separately for generator house foreman.

Q. Sheet 4, Item 3, even when twelve machines are being run, you allow how many men per shift for cleaning fires?

A. That is set up in great detail.

Q. Three men per shift?

A. Three men in each gang.

Q. That is three men on each shift?

A. I submit that that is set up in very great detail, three hours per machine per day, which is just about twice what you need, and three men in each gang.

Q. Well, that is not very understandable to me. What do you mean by shift? How many men cleaning fires per shift?

A. Three men in each gang for each shift. 36860

Q. And how many gangs per shift? Is it not a fact that you have allowed only three men per shift for cleaning fires even when twelve machines are being run?

A. Yes, three men per shift.

Q. Where the company has three gangs of six men each, and a foreman over each gang.

Mr. O'Brien: That is not in the record yet.

A. That is more men than you have got running the machine, if that is so.

Mr. O'Brien: You see, there is a loss of time in trying to assume something that is not in the record, that is not in the proof. 36861

Mr. Ransom: He comes here and endeavors to cut down the number of men this company needs.

Q. Do you know how many the company has?

A. No, the answer would be the same as to the similar question recently given.

Q. When using 100 per cent coke more men are required?

A. No.

Q. Not more men for coke?

A. No.

36862 Archibald S. B. Little, Cross.

Q. Removing clinkers, and so on, you don't require more men than for coal?

A. No, not with present day anthracite.

Q. Item 3, Sheet 4, in October you cut the number of men cleaning fires down to one?

A. No, that has got to be multiplied by three. I set up three hours of one man, and I get the total number of hours, 4,974, and then multiply that by 3 to get the total number of hours, so there would be just three times that number, three men. The same thing happens in the other clinkering gangs.

36863 Those figures are 36 hours, for instance, in January, are also multiplied by 3 at the bottom of Sheet 4 of Section 7.

Q. Tell me how many men you say for firing and clinkering in October?

A. Three men in each gang and each gang on three shifts.

Q. So that would be nine men a day?

A. Yes, sir.

Q. How many do you say for January?

Mr. Ransom: Judge, you are referring to what class now, the clinkers?

Mr. Ransom: Yes.

36864 A. Thirty-six men.

Q. Do you think that it is good operation, would be good operation to cut the number of men down in October to three when you might have occasion for starting up the fires and a larger production than you actually have during the summer?

A. Yes, I think so.

Q. Isn't it difficult to find capable men for cleaning gangs?

Mr. O'Brien: You didn't have much trouble in getting them at 17th and 42nd Street, did you?

Mr. Ransom: A terrible time.

Q. You don't think there is any difficulty in getting men for cleaning gangs in New York City?

A. There is difficulty in getting men for everything in these days.

Q. Are you aware that the local gas companies have had terrific difficulty in getting men for that sort of thing?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial.

The Master: Objection overruled.

A. I would assume that they have. The gas companies, all classes of industry, have had trouble in 36866
getting men.

Q. That is a kind that is especially difficult to get men for because of the nature of the work?

A. I don't think so.

Q. On this same Sheet 5, Item 9, what you call exhauster and machine men, you have allowed only two men on each of the three shifts, or six men a day?

A. At each plant.

Q. Do you know how many Mr. Woods actually has there for that work?

A. No.

Q. You did not investigate to see how many he 36867
had?

A. No, it would be difficult for me to investigate there without the books before me at the time to show what those men were charged to. The exhauster men, you will find them working not only on the relief holder exhausters, but on other exhausters for pumping gas. I don't know what they were charged to.

Q. Isn't the proof in the case, instead of these two men, that the company had a chief engineer,

three chief engineers who also looked after boilers and pumps, and three oilers—

A. You don't call them exhauster men, though; I would not.

Q. Would you call them exhauster and machine men?

A. No, not in that same term as I have used on this sheet, Section 7. You will find they are provided for in other places, under boiler house men, etc.

Q. In the blower room how many of the oilers do
36869 you say would be required when enough machines are being run to require two blowers?

A. Blowing the sets?

Q. Yes.

A. You would need less than one man per shift; you would not need all of one man's time, in other words.

Q. If the company has three would you say that Mr. Woods was maintaining an entirely unnecessary number?

Mr. O'Brien: That form of question is objectionable.

The Master: Objection overruled.

36870 Mr. O'Brien: Exception.

A. I certainly would.

Q. In your Section 3, Sheet 4, Item 7, you speak of mechanics. You say the mechanics would get $5 a day and the helpers $4, making the average man day cost $4.50?

A. Well, "mechanic" is perhaps not the right term to use for a man on the De Brouwer charging machine.

Q. What would you call them, operators?

A. They are just common laborers put on there, and they are given a little extra pay because they assume some responsibility.

Q. How many helpers, how many operators?

A. One helper on each machine for opening doors and sweeping floors.

Q. You would have six of these mechanics or operators and one helper, is that right? As you say, on each machine three shifts a day, a total of six mechanics?

A. And six helpers, one helper to each charging machine man. It would be twelve men all told, it says in almost the next line, and then six more men for operating the pushers. That is eighteen men per day per shift. 36872

Q. Mr. Little, in the last three pages of this statement, which comprise pages 11204 and 11219 of the printed record, you have made up a summary statement of operating expenses, etc., based upon the operation of the Astoria plant and the 21st Street and 99th Street plants, on the basis to the extent which you have indicated?

A. Yes, sir.

Q. Did you intend to convey the impression that your figures showing expenses beyond the holder included and incorporated the figures in Mr. Teele's exhibits, aside from the holder costs?

A. Yes, that was what I attempted to do, making such amendments as I have already testified to in view of the extra amount of gas assumed to be sold. 36873

The Master: From 11204 to what?

Mr. Ransom: 11204 and 11219. It is the last three pages of the blueprint sheets.

The Master: That cannot be right.

The Witness: Section 7, it is Part 2 continued. It is headed "Table of Operating Expenses."

The Master: 11254 to 11259.

Mr. Ransom: Yes, that is a typographical error.

Q. Have you with you Mr. Sangster's memorandum statement No. 8, called "Statement of General Office and Other General Expenses, Astoria Light, Heat & Power Company, for year 1918 and first eight months of 1919"?

A. No, I have not that here.

Q. Have you seen it?

A. Oh, yes. Maybe not after it was typed, but I saw the working papers.

36875 Q. You used various information from this exhibit—from Mr. Sangster's exhibit?

A. Either from his exhibit or from his working papers, plus my inspection of the books.

Q. And you assumed the correctness of his exhibit in respect of these figures?

A. In general, yes. In general I think it is very accurate.

Q. On Mr. Sangster's statement No. 8, his detailed statement, he gives the details of general office and other general expenses for the year 1918, the aggregate of which for the year he states to amount to $159,835.46.

36876 A. That is on Astoria, is it?

Q. On Astoria.

A. Oh, I did not take those figures from Mr. Teele's, except taking a total, and then on the Astoria I changed it somewhat for the reason that I already had in the general supervision an item of that character in my detailed production costs—that is, the general officers' salaries.

Q. Mr. Sangster, in what he called his statement No. 1, statement of operating revenues, expenses and net income, Astoria Light, Heat & Power Company, for 1918 and the first eight months of 1919, shows

that the Astoria Company's payments for what you call use of distributing system, that is the use of tunnels and transfer mains, for the transfer of gas from Astoria to the Borough of Manhattan—it is shown to aggregate the sum of $506,561.65 during 1918. In your Sheet 8, Section 7, you include or incorporate as the general expenses of the Astoria Company $81,000, did you not?

A. Yes, I think I can straighten that out.

Q. Where did you get that $81,000?

A. As already stated, the total expense as shown by his exhibit, or as shown on the books, less the 36878
general expense which I had put into the production plant. I understood—I may have been wrong—that those figures included the superintendence.

Q. How much of the total general expenses shown by Mr. Sangster, namely, $159,000 plus and $506,000 plus during 1918, a total of $666,397.11—

A. How much?

Q. $666,397.11—did you include in production costs?

A. In that you are including the cost of moving the gas from Astoria through the East River Company's mains?

Q. Yes. 36879

A. I set it up in here, in one of my statements, showing that I had not included that company. That would have to be taken into account as a general expense.

The Master: But you have not taken it into account?

The Witness: No, sir; I state here specifically that I had not done so, but I set up here the figures on Sheet 5 of Section 5. I have stated there, "The above table does not include the expense for the use of the distribution system,

which is set up on the books of the company for the year 1918, as follows"—and I show the detail of $506,561.65. I show it in detail. I assumed that was a distribution expense. Of course it should be taken care of.

Q. That is, to this Sheet 8 that should be added?

Mr. O'Brien: No, it does not mean that at all. We are going to controvert that.

The Master: Suppose you let the witness answer?

Mr. O'Brien: He said he set it up there;

36881 but he has made it clear.

The Master: Let him answer whether in figuring the cost of gas to the Consolidated Company from Astoria the cost of getting it from Astoria to Manhattan should be figured.

A. Yes. Something should be figured for that. I have indicated it.

The Master: They have got to get it over here.

Mr. O'Brien: I am talking about the exact figures, the claimed costs.

The Master: But you have got to get it from Astoria to Manhattan and it costs something

36882 to do that.

The Witness: Yes, and I did not want to put in anything about that, because I did not know the cost of investment in the mains.

Q. Let us take the item of taxes. Mr. Teele's figure for taxes was as shown on your Sheet 8, Section 7, $1,173,750. Mr. Teele's figures given on his exhibit, adding also the 30 cents, $1,173,750.30, or .0640 cents per thousand sold. You have taken the same total of taxes and have assumed an increase in the volume of sales to 22,000,000 cubic feet and have obtained a cost per thousand for taxes, so far as

taxes paid by the Consolidated are concerned, of .0533 cents or .018 cents less than Mr. Teele's figures.

A. Less per thousand. I used his figures, yes. I am not passing upon the taxes at all, of course. That is something that I just set up to complete the picture, knowing of course the Master was the only one who could settle that.

Q. But you have made up a table by which you undertake to reach the conclusion that this company derived, or should derive if it operated in the way which you indicate, a net profit from the operations of about nine cents per thousand cubic feet, as shown? 36884

Mr. O'Brien: I object to it. That is assuming without assenting to Mr. Teele's figures.

The Master: We understand that. That is what you figured net profit from operation, a little over nine cents, pretty nearly nine and a half cents?

Mr. O'Brien: Your Honor does not put that just right.

The Witness: .093, your Honor—.0935135, with all the assumptions, of course, already stated.

Q. You have done the same thing with salaries and expenses general officers? 36885

A. You mean I have set up Mr. Teele's figures and used a greater divisor?

Q. And used the larger quantity.

A. That is right.

Q. And you have done the same thing with Vacation and Sickness, Mutual Aid Society, Superannuation, and the like?

A. Yes, although I am not attempting to pass on that at all.

Q. That is, you assume the greater output without increase in number of workingmen, for whom provision would be made under that head?

A. My set up shows possibly less men.

Q. Yes.

A. But I did not take that into account in this vacation and sickness.

Mr. O'Brien: Just how many items were there that were adjusted to conform with the increased sales?

Q. I see this item here Use of Distribution Sys-
36887 tem. You took the same figure in dollars and applied to that this assumption of a 22,000,000 sales in 1920?

A. You mean the Item 15, Distribution Department? I increased that to two cents.

Q. No, use of distribution system.

The Master: Item 36.

A. That figures a little different, $4,400.

Q. That is, you took the round number there?

A. I took more than that, really. His figure is $4,107.70 or .0002. I used one .0002 also per thousand, so it would increase the amount of $4,400.

Q. What is his figure in cents per thousand for
36888 use of distribution system?

A. He says .0002.

The Master: .0002?

The Witness: Yes, .0002. I used the same amount per thousand.

The Master: Mr. Little said he took the same figure.

The Witness: On the Distribution Department, similarly, I did not use .0193, but I used two cents, which increased the cost about $90,000 a year.

Q. In connection with the taxes, did your studies

to which you were referring this morning disclose to you that the increase in the maximum day's output from 1914 to 1919 was 55 per cent, while the increase in the sales amounted to 12.6 per cent, annual sales?

Mr. O'Brien: I object to that, your Honor. You see we are loading up the record with these assumptions of fact.

Mr. Ransom: This has a bearing on this case.

Mr. O'Brien: Where is the proof on it?

Mr. Ransom: Why the defendants' exhibits 36890
show that, in their own figures, year by year.

The Master: Objection overruled. Read the question.

A. Read that, please?

Q. In connection with taxes, did your studies to which you were referring this morning disclose to you that the increase in the maximum day's output from 1914 to 1919 was 55 per cent, while the increase in the sales amounted to 12.6 per cent, annual sales?

A. I made no such study in reference to taxes; I did not look at taxes at all.

Q. I mean did you find that the increase in sales 36891
had been less than a quarter, or really 23 per cent of the increase in the maximum demand for which manufacturing plant must be provided?

Mr. O'Brien: That embodies conclusions, your Honor, and it assumes facts not proven, and I object to it.

The Master: I overruled the objection.

Mr. O'Brien: Exception.

A. Of course I cannot assume that certain other plant must be provided, because I think by operating your plants—

The Master: Eliminate from the question, "for which other plant must be provided." Is it the fact that the maximum daily output has increased 50 per cent, whereas the total sales of the year have only increased 12?

The Witness: No, five years, your Honor, from 1914 to 1919.

Mr. Ransom: Five years.

Mr. O'Brien: He has not produced any figures showing the maximum output.

The Master: We are asking Mr. Little about

36893 it.

The Witness: Of course, I can assume those figures are right. I believe they are right.

Q. Haven't you the figures there?

A. I can work them out, if you like. I can take your figuring on that. What is the question?

Q. Isn't that your impression as to the approximate ratio?

A. Oh, yes, that is about right.

Mr. Chambers: On those figures?

The Witness: On those figures, yes. The figures I got from their books.

Q. That is the approximate ratio on the figures

36894 which you have?

A. If you wish me to work it out I would be glad to do it.

Q. I do not care for it exactly, but is that the approximate ratio according to the figures which you have?

Mr. Chambers: Objected to, your Honor. The witness wants to look the figures up if he wants the figures exact.

The Master: Overruled. No, he does not. That is the trouble with it: he says it is all right, but he does not think it is worth while checking it up. He thinks it is about right.

Mr. Chambers: He did express a desire to figure it out exactly.

The Master: No, he did not express that desire at all. He said he could do it if Mr. Ransom wanted him to. What is the situation, Mr. Little—do you want to check it up and figure it out, or are you prepared to say that statement of Judge Ransom's is substantially correct?

The Witness: It sounds reasonable, and I think I would be willing to take it. It is pretty hard to compute on the witness stand, your Honor, when they are jumping from taxes to 36896
maintenance and back to boiler fuel.

Q. On that basis, assuming that such a ratio continued, would not a twenty per cent increase in sales carry an increase of approximately 86 per cent in maximum demand?

Mr. Chambers: I object to that as being speculative and problematical, incompetent.

The Master: Yes, but the witness is guessing that the demand this year will be in excess of 1919. Now, I think it is a fair question whether that means an increased maximum demand of 86 per cent.

Mr. O'Brien: Ten per cent it is, your Honor. 36897

A. If it figures out that way, that is a most serious situation that this company ought to take steps to cure, in going after its business in a way that will overcome those peaks. That is the most surprising situation that I have ever seen in any gas plant—a lot of surprising things in reference to these sales. They are not going up like they ought to, but people taking gas spasmodically, you might say.

The Master: That means that it costs more to make gas throughout the year; is that not so?

The Witness: Yes, but it does not say whose fault it is, your Honor.

By the Master:

Q. Mr. Little, you have expressed yourself very strongly about the surprising situation you find here—the smaller percentage of annual sales as against a very large increase in the percentage of maximum daily demand, haven't you?

A. Yes, sir.

Q. And you say this company is confronted with a situation that you have never seen in any other concern; is that right?

A. The situation as disclosed is somewhat appal-
36899 ling, I would say that.

Q. Yes. Now, this company has got to be prepared to take care of a maximum daily demand, has it not?

A. Yes, surely.

Q. And to do that it has got to have a lot of dead plant a good part of the year, has it not?

A. It does not have to have. The point I am trying to make, your Honor, is that some effort should be made to equalize these sales. It is being done by every other plant.

Q. But taking the situation as it exists, with a maximum demand increasing fifty odd per cent in
36900 five years, and the use by the public increasing annually only twelve per cent?

A. Not annually, your Honor. That is in the five years.

Q. In the five years, yes.

A. Yes.

Q. Upon which basis the increase in the percentage of the annual sales of 1920 would be twenty per cent, which would mean an increase in a maximum daily demand of eighty-six per cent—that would mean a plant capacity which would make a tremendous burden upon the consumers if they continue and insist upon using gas that way, would it not?

Mr. O'Brien: I object. In the first place, your Honor, you have a wrong assumption of about twenty per cent. It is ten per cent. In the second place, you are arguing with the witness instead of asking a question, and I am going to object to it.

The Master: Your objection is noted, and it is overruled.

Mr. O'Brien: I object to your taking over the examination of this witness.

The Master: That is overruled.

Mr. Chambers: I object to it on the ground 36902
it is incompetent.

Mr. O'Brien: The witness will have something to say about the use of promotion expenses if you will ask him.

The Master: I am trying to get the witness to tell me if it is not a fact that if the public insists upon a maximum tremendous demand upon one or more days in the year, as against a much lesser pro rata increase in the annual sales, does it not necessarily mean that the gas has got to cost the people more than it would if there was an equable use of it.

The Witness: That would follow naturally, 36903
yes. As to who is to blame, that is not in the question.

The Master: I am not passing on that either. I simply wanted to get on the record the picture that is brought out by your statement of the remarkable situation that is confronting this company.

Mr. Chambers: Ask him who is to blame.

The Master: Well, he was not saying.

Mr. O'Brien: Well, he will say.

Mr. Chambers: Will you ask him that?

The Master: Not at this time.

Mr. Chambers: Will you let me ask him?

The Master: Not at this time. I will on re-direct; make a note of it.

By Mr. Ransom:

Q. That situation, involving an increase to 22,000,000, on the same assumption, would bring a very great increase in the amount on which taxes had to be paid?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial.

The Master: Overruled.

36905 Mr. Chambers: Not proper cross-examination.

The Master: I think it is argumentative.

A. Of course, it follows if you have more plant you have got more money invested, and you would have to pay more taxes if the City got after you.

Q. Did you make any study as to the amount which according to its books and records the Consolidated Company had annually spent for a thousand cubic feet of gas sold; that is to say, from 1884 to the present time, for renewing and replacing its manufacturing plant and distributing systems?

36906 A. Only in a general way.

Q. What did you ascertain was the figure—about .034 cents?

A. A figure around 3 cents—that 3 in the records.

Q. .034 cents?

A. Yes that was the provision. I do not know that is all that they spent.

Q. No, the provision, you may recall, was 3, the actual expenditure testified to was .034 cents on the average.

A. I do not remember that.

Q. Your statement or your summary on these last three pages, by which you reach this 9 cents plus net profit from operation, omits the amount of $349,647.71, or about 3 cents per thousand, shown on Mr. Teele's statement?

The Master: For what?

Mr. Ransom: For renewals and replacements.

A. Yes, I would call it by a different name and stated in there that I have not taken this into account, leaving that to the Master, of course, as to what the fair rate of depreciation is to meet accruing— 36908

By the Master:

Q. Well, renewals and replacements must be considered in the cost of making the gas; is that so?

A. I have stated so in there, yes, but it is not for me to pass upon it.

Q. Assuming Mr. Teele's figures, that would reduce the net profit, then, to about 6 cents; is that correct?

A. Yes, if you assume his figures.

Q. And assuming now a cost of bringing the gas from Astoria over here, that would reduce it a little more, would it not?

A. Yes, sir. There is another figure that you 36909
want to add back in there, that I did not take into account, but that I did mention in the early part of the report. There is some credit for drip oil; that is in the production.

Q. While we are on that, you have gotten to a point of giving me the net profit. When you were on the stand before you promised to get me some figures as to what in your opinion fairly represented the average cost of a plant on the production basis. Have you got that for me?

A. Yes, I have some figures, your Honor; but be-

fore you get from the profit might I say that it should be noted, of course, that in addition to this profit here shown I have included the profit or return at seven per cent in the Astoria plant.

Q. Yes, on the cost of gas from Astoria?

A. Yes, on all gas made at Astoria. The profit on the investment at Astoria has been set up, so that is additional profit to provide for the Consolidated requirements.

By Mr. Ransom:

Q. If you did not include that in the expenses you,
36911 of course, would have to include 16,000,000 more in the sum on which you would compute your investment return?

A. Yes, it is taken care of one place, of course. I just wanted to show it is taken care of already.

Q. As far as the fifteen million and a half is concerned?

A. Yes.

By the Master:

Q. On page 11272 I said: "If you are familiar with the conditions in 1914 sufficiently to say, give me your opinion when you come back for cross-examination as to what you think in 1914 would be fairly
36912 required under accepted or generally accepted conditions, based upon a thousand cubic feet, to put up the building with the necessary apparatus to make gas." Mr. Ransom suggested that I take a low ebb year, and finally you said: "I have percentage increases, your Honor, in the Chicago cases.

"The Master: Do that. Let us have it for what it may be worth. I do not know whether it will help me any, but it may. We will see what it says. * * * I think if he takes 1914, 1917 and 1918, we will get a pretty fair idea of his opinion."

I am simply asking for an opinion which I may not use at all.

Mr. Chambers: May I object to it on the ground it is incompetent, irrelevant and immaterial, not proper cross-examination.

The Master: You certainly may object. I overrule the objection.

Mr. O'Brien: I certainly will object to it. You have taken over the case and the examination of the witness in your own way. It was not cross-examination, like a good many questions that you asked the witness when he was on the stand before, being examined by Judge Ransom. They were not cross-examination, and this ques- 36914
tioning of the witness is entirely apart from the proofs in the case.

The Master: Yes, I think it may help me. I do not know whether it will or not; it is purely an opinion, and I will take it for what it may be worth.

Mr. O'Brien: I feel in my bones you have got some plumbing work now, what, speaking about Judge Ransom, the Appellate Division, Second Department, called short-circuiting.

The Master: Fortunately, my report does not go to the Appellate Division but goes to the United States Circuit Court of Appeals and the 36915
United States Supreme Court, who may have a different attitude about those things. Let me have whatever figures express your opinion on that subject, Mr. Little.

A. Well, from figures in a big case that I worked on— .

Q. That was the Chicago case?

A. Yes, I had to get it as a total. That was per thousand cubic feet of gas sold per annum and that would work about $2.80 per thousand.

Q. For what?

A. For the whole thing. I had to start with that.

Q. What do you mean by the whole thing?

A. Land, building, equipment, distribution systems and materials and supplies.

Q. What do you mean by "materials and supplies"? A. Cash and materials on hand.

Q. You mean working capital?

A. Yes.

Q. Of course, the question of land varies in different localities.

A. Yes, I was just mentioning them. I had to
36917 take them that way.

Q. You have the figures for 1914, 1917 and 1918?

A. Yes.

Q. What was that in 1917?

A. I was just looking for those figures here. I believe I have them.

The Master: The witness says he has the percentages for 1917 and 1918 in the Chicago case.

Mr. Chambers: This is an opinion on a branch of the case upon which he was not offered by the defendants.

The Witness: I have the figures in the city, your Honor, on the increases—actual figures that
36918 the conference of engineers had worked up. I have not got them here; I was almost certain that I had, but my recollection was in different kinds of material it varied from about 67 per cent up to about 110.

Q. And take this $2.80 per thousand—

A. Well, possibly 90. The figure I gave you before is very, very close—90 per cent more.

Q. For 1917?

A. Yes.

Q. 90 per cent more on the whole thing?

A. Yes.

Mr. Ransom: What was the figure on your coke oven increase?

The Witness: That is the same.

Q. How about 1918?

A. 1918 would be more yet.

Q. How much would you say for 1918?

A. At least 100 per cent over 1914.

Q. That $2.80 represents the land, the building, the apparatus, the working capital and the distribution system?

A. Yes, sir.

Q. Mains and services and all? 36920

A. Yes.

Q. Was that based on cost of construction in 1914?

A. The figures were made up in 1914, and I would say they represent very, very close to the year 1914, although some of them went back further.

Q. Cost of construction?

A. Yes, sir; undepreciated.

Q. What?

A. Not depreciated.

Q. Not depreciated?

A. No.

Q. But upon the theory that to produce a thousand feet of gas in 1914 a plant represented a value or 36921
cost at that time of $2.80?

A. Yes. That was a water gas plant entirely.

Q. Only water gas?

A. Only water gas.

Q. Yes, but the coal gas would be an entirely different basis, would it not?

A. It would be more; yes, sir; to the extent that you have coal gas plants.

Q. What I wanted was a mixed coal gas and water gas plant.

Mr. Ransom: On a fifty-fifty basis.

The Master: Yes.

A I do not know that there is such a thing in this country, your Honor.

Q Have you any idea what relation to the 82.80 in 1914 a coal gas plant would have? Would it twice that?

Mr O'Brien: Your Honor, I am going to object to this.

Mr Chambers: I object to asking the witness to guess. It is too important to ask him to guess on a matter of this kind. I object to it.

Mr O'Brien: I do not think we ought to spend
36923 the afternoon of Lincoln's Birthday with these matters.

Mr. Chambers: It may be funny and all that, for the Master to bring out something that was not brought out by counsel for defendants on direct, and something that may be very important in the case, but I think he ought to have time to study it.

The Master: Why I asked him these questions on January 23rd.

Mr. Chambers: Yes, and I would have objected to them then if I had been here, and I object to them now.

36924 The Master: He said he would get them up for me.

Mr. Chambers: No, this very thing you are talking about now—he did not think there was such a thing in the country.

The Master: I was asking him generally about the relation between production per thousand cubic feet and a gas plant.

Mr Chambers: Then you asked him about a coal gas plant.

The Master: Yes.

Mr. Chambers: And he is not prepared to give it.

Mr. O'Brien: Whatever his answer might be, figured out in any way that your Honor might want it figured out, how could it supplement the proofs that the United States Courts have required?

The Master: I do not know. I may show you when I decide the case.

Mr. O'Brien: Why, it is ridiculous.

The Master: You may not think so when I get through with it. The coal gas plant, Mr. Litt

A. The coal gas plant, for equal capacities, would cost about half as much more for the equipment. 36926

Q. It would be $1.40 more?

A. No, sir. Now, you are pulling in the distribution.

Q. But I was trying to get from you how much I had to add to the $2.80 per thousand if I had a coal gas plant instead of a water gas plant.

A. Figuring the equipment in the water gas plant at about 62 cents, would—

Q. Out of the $2.80?

A. Yes; a coal gas plant, if it was all coal gas, would be nearer 90.

Q. So that out of the $2.80 the equipment would represent 66 cents? 36927

A. 62. I think I gave it, your Honor.

Q. 62?

A. Yes, sir; without buildings.

Q. Well, the buildings would be the same, substantially?

Mr. Ransom: No, the coal gas buildings and land are very much higher.

A. No, the buildings would be double.

Q. The buildings would be double?

A. Yes, and the buildings I have in at 13 cents.

Mr. Ransom: On water gas?

The Witness: On water gas. That would make about 20 cents a thousand on a coal gas plant.

Mr. Ransom: This is 1914.

The Master: Yes, we are talking about 1914.

Mr. Ransom: How about land?

Q. And the equipment would be 90 cents?

A. Yes.

Mr. Chambers: This is all subject to our objection and exception.

The Master: Yes.

36929 Q. You need more land for a coal gas plant, do you not?

A. Yes, but this particular plant had the land already bought for a coal gas plant, and the figure is pretty high. It is 20 cents. It would be the same in both cases.

Q. What part of this $2.80 did you figure for distribution?

A. $1.50.

Q. For the mains?

A. Yes.

Q. Holders?

A. Yes.

36930 Q. Did you subdivide that $1.50 into holders and mains?

A. No, sir; I did not. I could do that, but I have not done it up to now.

Q. In arriving at the cost or value of mains one has to consider the character of the soil and the depth at which the mains are laid, does he not?

A. Yes, sir; and if you went through paving, and so forth—all conditions.

Q. I mean if they had paving or rock or dirt and all the rest of it?

A. Yes.

Q. Do you know whether this $2.80 is based upon asphalt or Belgian block pavement, or macadam, or what?

A. There are all kinds of paving material, asphalt and cedarwood blocks, and I have seen some places where the paving was not cut at all. The soil in Chicago varies a whole lot. For instance, some of it is fairly easy digging, other places it means a lot of shoring.

Q. Any rock?

A. Not much.

Q. Rock would make it a good deal more expen- 36932
sive, would it not?

A. Rock would make it more expensive, but there is a condition where they have blue clay, which is the most peculiar thing I have ever seen. You need one man to dig it up and another man to scrape the shovel.

Q. What committee was it that you referred to before, in connection with these figures? You said some engineering commission.

A. Yes, sir; in the People's Gas Case the Commission is now trying to find the value of the property and it is agreed that the attorneys and engineers shall sit down together and try and arrive at the fair cost, 36933
according to the various theories, and by request of both company and City I was put in charge of the hearings. That is, we confer, do not have any stenographer, but keep minutes, so that at the end we will come out with agreed-upon costs on five different theories. Now, necessarily one set of engineers will not say that one theory is all right that is propounded, but if your theory is to be given any consideration whatever we agree that those prices are reasonable.

Q. What are the five different theories that you are to have under consideration?

A. There is the investment cost, the historical reproduction cost, the January 1, 1907; there is the five-year average.

Q. What January 1, 1907—reproduction?

A. Yes, reproduction.

Q. Less depreciation?

A. Both.

Q. Both ways?

A. Both ways. There is the five-year average which the company wishes to select, taking in the war prices. Then the Commission insisted on a ten-year
36935 average of 1905 to 1916, both inclusive.

Q. Average of what, cost of reproduction?

A. Cost of reproduction.

Q. Less depreciation?

A. Less depreciation, set up separately. It is set up both ways, so that the Commission does not have to take our judgment or the engineers for the City and the company, their judgment; but we will set up in great detail all that we did in arriving at what we call our judgment, and the Commission can then see if it is reasonable. It is the best plan I ever heard of, of saving time and trying to get a record that is clean. But these figures were long before this conference
36936 came into effect.

Q. You said here on mimeograph page 11272 that 1914 does not vary from a ten-year average ending December 31, 1918?

A. A very little.

Q. And varies very slightly from a five-year average as of that time?

A. Yes, sir.

Q. Is that correct?

A. Yes, sir. We have set that up in great detail.

Q. Is that still your opinion?

Mr. O'Brien: Were you speaking there about properties or about operating expenses?

The Master: No, the value of the properties, cost or value of investment, whatever it is.

Mr. O'Brien: Equipment.

The Master: Yes, whatever it is finally to be called.

Mr. Chambers: The $2.80 you gave was without depreciation?

The Witness: Yes.

Q. Didn't you say that the value of the plant as you arrived at it in 1914—what was it intended to be, b and new?

A. I never said value, your Honor. I endeavored 36938
always to steer away from that.

Q. What difference is there between the cost of a plant which would produce a million cubic feet and a plant without regard to its cost which would produce a million cubic feet, having the same operating efficiency, so far as the rate base is concerned?

A. That would be something for the attorneys to answer.

Q. I ask you what difference there is.

Mr. O'Brien: I object to it as incompetent, irrelevant, immaterial and speculative.

The Master: No, it is not speculative.

Mr. O'Brien: I object to the inquisition of the 36939
Master.

The Master: It is not a question of law at all; I am talking about an engineering problem.

Mr. O'Brien: You are indulging in speculations entirely foreign to this case and asking the witness about a company in Chicago.

The Master: No, I am not; I am talking about a company anywhere. If a plant will produce a million feet of gas, whether it is new or old.

Mr. Chambers: It makes a lot of difference whether it is new or old.

Q. If it has an equal state of efficiency it does not require any more men to operate, or any added expense; it does not make a bit of difference whether it is new or old?

A. No, your Honor, but anybody in passing upon that would have to take into account the full depreciation, and had it set aside or had it reinvested.

Q. No, I am talking about this proposition: You are a gasmaker, see, and you have two plants, one at 14th Street which produces a million cubic feet of gas, which is twenty years old, and one at 42nd Street
36941 producing a million cubic feet of gas and which is two years old, and they both are of equal efficiency in the sense that you need precisely the same number of men at 14th Street as you do at 42nd Street, and the same amount of material and the same elements precisely. Is there any difference in the value of it as a productive plant, whether it is old or new?

Mr. Chambers: I object to that as incompetent, irrelevant, immaterial and argumentative.

Mr. O'Brien: I object to it also. You are not taking a specific piece of property and you are not describing the details of the equipment.

The Master: Yes, I am. I am giving him the
36942 same efficiency and equipment. I do not mean to intimate that these plants are in that position; I am trying to get the expert's opinion, talking about gas plants.

Mr. Clark: Assuming they are the same, a two-year old plant and a twenty-year old plant?

The Master: Yes.

Mr. O'Brien: I am going to object to it, that the Master is taking the witness's examination into his own hands and going off into a realm of speculation that is not in this case. I contend that the cross-examination is the province of

36943

counsel for the complainant company and not of the Master.

The Master: That is true.

Mr. O'Brien: And that these matters are not within the province of the Master.

The Master: That may or may not be true.

Mr. O'Brien: And they are done over my objection. The witness was not presented upon the questions that he is now being catechised about.

The Master: He need not answer if he does not want to.

Mr. O'Brien: Then I am telling him not to 36944
answer I will say to him that he does not need to answer your question if he does not have

The Master: I will say that myself. He is here as an expert giving opinion evidence. If he does not want to give me his opinion evidence on something that I asked him about, he has a perfect right to say that he does not want to give me his opinion on it.

Mr. O'Brien: I will say right here in support of my objection, when he was on the stand on cross-examination by Judge Ransom you took the examination of the witness into your own hands over my objection, and undertook to ques- 36945
tion him about matters not brought out on direct, about matters as to which he was not brought forward by the defendants as a witness.

The Master: Do you represent the public here?

Mr. O'Brien: I represent—

The Master: The public?

Mr. O'Brien: The public to the extent—

The Master: Then you ought to be as anxious as I am.

Mr. O'Brien: To the extent that I represent the defendant Edward Swann. Wait a minute

36946

until I get through, now; I am making this record. He was asked questions there as to candle power, as to fair return and working capital, and a number of other matters as to which he was not put forward by the defendants as a witness concerning which he was not asked anything on direct examination. He was asked these questions, they were limited; he did not have a chance to go into details concerning the matters that he was interrogated on. The Consolidated Gas Company took a portion of the testimony that was given and gave it to the newspapers, and, not

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only that but another gas company that is contesting this same law, and now moving for a reopening of its case, took a portion of that testimony, given under the conditions that I have narrated, and have put it into affidavit form.

The whole thing is entirely improper, it is contrary to the rules that should govern a tribunal of this kind, and I am going to object to it; and I am objecting further because it is so entirely speculative it will only be misleading. It does not get us anywhere to begin to talk about imaginary plants and begin to ask this witness concerning some matter that these defendants

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have not offered him as a witness on, and I protest against it.

The Master: I will repeat what I said before, Mr. Little, that in any instance where I ask you for your opinion you have a perfect right to say that you prefer not to give your opinion on the subject.

Mr. O'Brien: I will give my direction to my witness who is on the stand, then.

The Master: Counsel for the defendant Swann and for the Public Service Commission and for the State of New York have a duty to perform,

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not only to their particular clients but to the public, and it is their duty, as it is mine, to get out every possible fact that may by any possibility aid me and aid the Court in settling this question in a way that will leave no possibility of doubt.

Mr. O'Brien: But on the question of candle power he was not asked questions that would give him a chance to fully explain what he means when he spoke about candle power. He was not given a chance to tell you that when he spoke about a B. T. U. standard he meant the price should be correspondingly reduced—and the com- 36950
plainant company here took that testimony and gave it to the newspapers.

Mr. Ransom: I do not believe that is true.

The Master: I am not at all concerned with whether it is or not.

Mr. O'Brien: And a witness for the complainant company in this case, Mr. Miller has made affidavit using that misleading and incomplete statement as to candle power, in another attempt made to attack the 80 cent Gas Law in the Kings County Lighting Company case. I cite that simply as an instance of the irregularity of method with which this case is being conducted, 36951
and I say to the witness now that he need not answer the Master's questions.

The Master: The question, Mr. Little, that you need not answer, just as you please, is whether there is any difference in the two plants I have described in the sense of the productive value of those two plants, each producing a million cubic feet of gas per day.

Mr. O'Brien: Your Honor has told the witness that he need not answer if he does not want to.

The Master: Precisely.

Mr. O'Brien: I direct the witness not to answer it.

The Master: I do not think you can direct him. I have told the witness what his rights are.

Mr. O'Brien: I have some responsibility for this witness on my branch of the case.

The Master: Do you want to answer that question, Mr. Little?

The Witness: No, I do not—

36953 The Master: Under Mr. O'Brien's direction?

The Witness: And some others I can think of.

The Master: What are the others?

The Witness: I am a member of the Illinois Commission and I do not want to go around stating my views as to what is value, because that is not an engineering problem at all.

The Master: All right, go ahead, now, Judge Ransom.

By Mr. Ransom:

Q. Mr. Little, do you remember in the Freeport case before the Illinois Public Utility Company in September and October of 1919, more particularly on
36954 Monday, September 29th, before Examiner Pinney, being interrogated by Mr. Slattery these questions and making these answers—

Mr. O'Brien: Just a minute before you read that into the record. Your Honor, I object to it; it is an improper and irregular way of presenting the matter. If this record is an authentic record it ought to be authenticated in this case before it is presented to the witness, and I at least would demand that the witness be shown the testimony, the whole testimony, before he is asked this question.

The Master: This is a perfectly proper method of examination. The objection is overruled.

Mr. O'Brien: Exception.

Q. (Continued.) "Q. Item No. 25, boiler fuel, Mr. Little. A. Yes, sir. Q. Tell us how you got the total used and the unit cost, please. A. I had 36 pounds at $2.70; that is 1.72, plus three per cent; in other words, 4.47 a day, in which I figure two-thirds would be the use; that is of the coal, at 4.47, the other third being the breeze at two dollars a ton. That would be 24 pounds at .2325 cents equals 5.2640, and 12 pounds at two dollars, making 6.5640. Q. Mr. 36956
Little, if you assume that they should continue to manufacture all water gas, in which event, of course, we would have no breeze, how much would that net be increased? A. It wouldn't increase the coal gas unit cost, because you wouldn't be making coal gas. Q. Well, this is the water gas situation. A. No, coal gas. Q. I beg your pardon, Mr. Little, it is under water gas, page 74. A. Oh. Well, then, perhaps I was giving you the figures on coal gas. Now, boiler fuel, I figured 19 pounds per thousand. I used the same unit cost because if you didn't have any breeze the 183 would be changed to 3235 as the unit. Now, our unit is one eighty-one forty-five hundred." Do 36957
you remember being asked those questions and making those answers?

A. No. I do not. There seems to be something wrong there.

Q. So far as quantities of boiler fuel for coal gas are concerned, what do you say is wrong: what seems to be wrong, if anything—36 pounds?

A. That is entirely wrong—no question about that.

Mr. Chambers: I object. That is not the proper way to examine him. He says there is something wrong and that ends it.

36958 Archibald S. B. Little, Cross.

The Master: The objection is overruled. Tell us what is wrong about it.

Mr. O'Brien: I request that the minutes that have just been read by Judge Ransom be turned over to the witness for his inspection.

The Master: Your request is denied.

Mr. O'Brien: Exception.

The Witness: In that testimony they must have been working at cross purposes somewhere, because I cannot imagine having them suggest the use of 36 pounds. In fact, the questions and answers there do not indicate that. Another one
36959 is 19 pounds, stated there for coal gas.

Q. I show you, Mr. Little, a blueprint entitled, "Fair Operating Costs and Expense Exclusive of Interest, Depreciation and Profit, Based on the Production of Water Gas at Present and Anticipating Some Coal Gas Production in the Future, Prepared after Investigation of Books, Records and Plant Conditions by A. S. B. Little, August 1, 1919, checked J. M. L. and C. E. R." showing unit total used and price per unit and cost in dollars and per thousand feet, and ask you what your figures there were for boiler fuel?

36960 The Master: What is that? What case is that?

Mr. Ransom: That is the Freeport case, is it not?

The Witness: It looks like it, yes.

Mr. Ransom: At page 73, referred to in the excerpt of the testimony?

A. It shows there for making mostly water gas.

Q. No, that first page there is entitled "Coal Gas," is it not?

Mr. Chambers: Just a minute. You asked him a question and he is answering it.

Q. Your first figures on that sheet are for coal gas, are they not?

Mr. Chambers: I suggest that he answer the question.

The Master: He will answer the question that is put to him.

Q. That Sheet 73—

Mr. Chambers: Just a minute.

Mr. Ransom: I am putting the question to him.

Mr. Chambers: You put one question to him already. 36962

Mr. Ransom: I withdraw it.

Q. Sheet 73 is headed "Coal Gas," isn't it?

Mr. Chambers: I object to that.

The Master: Objection overruled. Will you please answer whether that Sheet 73 is headed "Coal Gas"?

The Witness: There is a subheading there.

The Master: Let me see it (taking paper).

Mr. Chambers: There was another question asked.

Mr. Ransom: I have withdrawn it.

Mr. Chambers: That is different. It is withdrawn, then. That presents a different situation. 36963
Now, this question.

The Master: The Items 1 to 18 on this sheet that you have in your hand, Mr. Little, refer to what, coal gas or water gas?

The Witness: They refer to an apportionment of the—

Mr. Chambers: I object on the ground that Mr. Ransom has a question pending.

The Master: He has withdrawn it.

Mr. Chambers: Is that withdrawn, too, question No. 2?

36964 The Master: Yes, that is withdrawn.

Mr. Chambers: Now, the Master has one, and I object to that.

The Master: That is overruled.

Mr. Chambers: Exception.

Mr. O'Brien: I again object to the Master taking out of the hands of counsel for the complainant the cross-examination of this witness.

The Master: Your objection is overruled.

Mr. O'Brien: Exception.

Mr. Ransom: I ask that Mr. O'Brien sit down and refrain from conferring with the wit-
36965 ness while he is under cross-examination.

The Master: Yes, Mr. Ransom's request is granted. Take your seat, Mr. O'Brien.

Mr. Chambers: Mr. O'Brien was not conferring with the witness.

The Master: He is standing up. Take your seat.

Mr. O'Brien: I object to the statement of counsel that there is a conference with the witness.

The Master: Well, I do not think there was.

Mr. O'Brien: You know there was not.

The Master: I was not paying attention. I
36966 was talking to Mr. Neumann here.

Mr. Chambers: The Master has looked at that, why can't we all take a look at it?

The Master: You can all take a look at it.

Mr. O'Brien: I insist, then, that I do not have to sit down when the witness is handed a paper. I have a right, as Mr. Ransom did a hundred times in this case, to get up and look at the paper handed to the witness.

The Master: I gave you that right.

Mr. O'Brien: That is not conferring with the witness. You have directed me to take my seat.

The Master: If you want to look at the paper take a look at it again.

Mr. Ransom: I object to Mr. Chambers conferring with him.

The Master: Mr. Chambers can look at it, too.

Mr. Chambers: I am not conferring with the witness. Why do you make misstatements repeatedly? I have not said a word to him. Have I said a word to you, Mr. Little?

The Witness: No.

Mr. Ransom: I suggest that I be permitted 36968
to continue the cross-examination.

Mr. Chambers: Just a minute. You made a false statement: why aren't you man enough to withdraw it, like a decent lawyer?

The Master: There is a question here, Mr. Little. I have been trying to get an answer to it. I am going to read from this statement. I read as follows: "Items 1 to 18, Account Coal Gas based on 34 1 2 million feet, made in four months, October, 1919, to January, 1920. Next column is 'Unit,' next one 'total used,' next one 'price per unit,' next one 'cost in dollars,' next one 'dollars per thousand feet.'" I am asking 36969
you again what do the Items 1 to 18 on this sheet, the last item being "net cost of coal gas in holder," refer to, coal gas or water gas, in whole or in part: what do they refer to?

The Witness: Will I be allowed to make an explanation afterwards?

The Master: Yes, certainly.

Mr. Chambers: I object, I submit that he be allowed to see the typing at the top, which has something to do with the question.

The Master: He will answer my question now and he will be given every opportunity to explain anything he wants to later.

Mr. O'Brien: He is not given an opportunity if his answers are clipped off: If his answers are not complete he is not given an opportunity, and I protest against the Master conducting this cross-examination.

The Master: Now, I am going to get an answer. Do those Items 1 to 18 refer to coal gas or water gas?

The Witness: If your Honor will immediately after I make my answer yes or no—

The Master: No, I am not making any bar-
36971 gains with you. There are lawyers here to bring out any explanation. I want to know whether those Items 1 to 18 are coal or water gas.

The Witness: Acting on the advice of my counsel at the noon recess, I will not answer unless I get an opportunity to explain my answer.

The Master: You will answer that question, Mr. Little, whether you want to or not, one way or the other, or your entire testimony will be stricken from the record.

Mr. Chambers: I ask that the Court advise the witness, which would be a proper thing, that if he does not want to, the witness need not an-
36972 swer yes or no unless he is allowed to explain the yes or no.

The Master: The Master will do nothing of the sort.

Mr. Chambers: I take an exception.

The Master: The Master rules that question calls for a yes or no answer, and there will be no explanation tied onto the answer. The witness will be given every opportunity at the proper time to explain his testimony. There will be an answer to that question or his entire testimony will be stricken out.

Mr. O'Brien: On what ground would you strike out his entire testimony?

The Master: Because the witness says he refuses to answer the question.

The Witness: Pardon me, I have not.

Mr. O'Brien: If the witness says yes or no his answer will not be yes or no. On what ground does the Master say he will strike his testimony off the record?

The Master: The witness said he would not answer the question on the advice of counsel.

The Witness: I did not say that.

Mr. Chambers: He did not say that, if you will pardon me. 36974

The Master: Then you will have to keep still.

Mr. Chambers: I am objecting.

The Master: I have ruled on it.

Mr. O'Brien: I think you ought to advise him, and I respectfully submit if he cannot answer yes or no he is entitled to say so.

The Master: This discussion has got to stop; you have your exception. Answer that question, Mr. Little.

The Witness: May I have the question read?

The Master: Do those items refer to coal gas or water gas—Items 1 to 18?

The Witness: Items 1 to 18 refer to coal gas. 36975

The Master: Now, go on, Judge Ransom.

Mr. O'Brien: Will the witness now be given an opportunity also, as the Master stated, to make his explanation?

The Master: On direct-examination is the time to make explanations.

By Mr. Ransom:

Q. On Sheet 74, Items 19 and following to 35 relate to water gas; is that correct (handing witness)?

A. Item which?

Q. 19 to 35.

Mr. O'Brien: I renew my objection on the ground that the counsel has taken an isolated tabulation or set of items out of a bundle of papers there, I suppose it includes about fifty different sheets, and the question does not mean anything, it is incompetent, irrelevant and immaterial.

The Master: The objection is overruled.

Mr. O'Brien: Exception.

A. Water gas.

Mr. O'Brien: I now ask that the two pages
36977 be marked for identification concerning which the witness has just been interrogated by the Master and by counsel for the complainant.

The Master: Application denied.

Mr. Chambers: I ask that the papers be kept here available in court so that we may have him explain it.

The Master: That will be done.

Q. Now, I ask you on the basis of your table of fair operating costs and expense, Sheet 73, what was the number of pounds of boiler fuel per thousand?

Mr. O'Brien: Objected to on the ground that
36978 the interrogator has not included in the question all of the sheets that relate to the two subjects concerning which he has catechised this witness.

The Master: Overruled.

Mr. O'Brien: Exception.

A. Close to 36.

Q. And what was bench fuel per thousand?

Mr. O'Brien: Same objection.

The Master: Same ruling.

Mr. O'Brien: The question does not incorporate the whole of the subject-matter to which

the collection of figures there in those many pages refer.

The Master: You have ample opportunity to spread your explanation on the record.

A. 340 pounds of bench fuel per ton of coal carbonized.

Q. And that would be how many pounds per thousand?

A. 17.

Q. How do you figure 17?

A. I did not figure it; I just gave it quickly.

Q. Then figure it. This is coal gas operation? 36980

A. About 32 pounds per thousand the way I figure it now.

Q. Nearer 33, isn't it?

A. It is 32.6, plus.

Q. Not 17 as you stated?

A. I said 34, didn't I, your Honor? You are asking me to figure here very quickly. It is very difficult to jump all over the place.

Q. Now, I show you page 74, continuation of this same table, 6, water gas, based on 95 1/2 million feet. What do your figures as to the proper amount of boiler fuel per thousand show?

A. Almost 20. 36981

Q. And generator fuel?

A. That is coal, generator coal, soft coal.

Q. How many pounds?

A. Slightly over 44.

Mr. O'Brien: I ask that those pages concerning which the witness was interrogated, be marked for identification.

The Master: The application is again denied.

Mr. O'Brien: Exception. I think the record might show we are proceeding slowly.

Mr. Ransom: Yes.

Mr. O'Brien: With the many conferees of the interrogator taking up the time of the interrogator, we have lost about four minutes now.

Q. Your figure for Astoria, Mr. Little, shown on Sheet 2 of your tabulation as to Plant A, boiler fuel, item 25, is 3 1/2 pounds of boiler fuel?

A. Yes, I answered that this morning.

Mr. O'Brien: The exhibit shows it, does it?

Mr. Ransom: It can be computed from the exhibit.

36983 Q. One of the sections of this first statement which you put in evidence, was based on the plan of removing the 21st Street station to Astoria, moving the plant?

A. The 21st and 99th Street. It was just an alternative I set up because I understood the Master asked about it.

Q. You would not recommend that to the Master?

A. No.

Q. Or to the company?

A. No.

Q. In your estimate of the cost of making gas by the By-product Coke Oven plan in the second
36984 statement which you put in evidence, have you any particular type or kind of oven in mind?

A. Yes, I have.

Q. What?

A. It was based upon the Roberts Oven. That is the first coke oven, the straight coke oven plan.

Q. That is by the straight coke oven you mean the By-product Coke Oven, the first system?

A. Yes, that is right.

Q. That is not true of the matter you put in yesterday afternoon, regarding what you called the chamber ovens?

A. No, the chamber ovens are the Koppers.

Q. That is, the chamber oven exhibit which you put in yesterday afternoon relates to and is the same thing as the combination gas and coke oven of the Koppers Company?

A. Yes, it is something new that they are making, the idea is not new, but it is a little new to this country.

Q. But this chamber oven which you referred to in the schedule put in yesterday, is something new that is being developed?

A. It is new in this country, it has been developed 36986
very considerably in Germany, and it is in use in Joliet, for the plant of the Western United Gas & Electric Company, which is run by Senator Copley.

Q. Well, the only plant in this country in which this chamber oven as you call it is used, is this Joliet Company?

A. Of this particular type. I think Providence has something like it, but it was not complete, in that Koppers did not furnish the producers, and the producers are a failure, that is the outside part, it is not the oven itself, it is the system of producing heating gas. Then there are other plants of a somewhat
similar character made by the Improved Equipment 36987
Company of this city, and in use at Jackson and at Flint.

Q. Michigan?

A. Michigan, yes.

Q. Well, you agree that the producers have been a failure?

Mr. O'Brien: He did not say that, Judge.

A. The producers were not built by Koppers, because they were not allowed to build the producer, and I have reason to believe that the producer plant

as built by somebody else and applied to a Koppers oven, was not a success.

Q. I am a little bit out of turn, but I would like to ask something on this chamber oven matter, so that we can work on it meanwhile. This exhibit that you put in yesterday afternoon is for how many chambers, as you call it?

A. You got away with all the copies of my exhibits.

Q. I will let you have one.

The Master: I have one. Here is one.

The Witness: As shown on page 2, 100 ovens.

36989 Q. That is on page 2 you see 92.6 chambers, which you call 100?

A. Yes, sir, because you could not build 92.6, you build two batteries of 50.

Q. Well, on page 1 you refer to 110 chambers to produce 20,000,000 cubic feet of gas for sale?

A. The 110 is wrong, it should be 100.

Q. That is an error?

A. That is an error, yes, sir; it may be a typist's error, all the figures are based upon 100, as shown on the details.

Q. Now, is this chambers oven, as you call it—

A. Chambers.

36990 Q. Chambers oven?

A. Yes.

Q. Is this chamber oven inclined, vertical or horizontal?

A. Horizontal.

Q. What are its dimensions?

A. The oven is on an average of 17 inches wide, and I think it is about 13 feet high.

Q. And how deep?

A. I haven't those figures here, I have given the capacity in per day.

Q. Well, first what I want is the dimensions.

The Master: The capacity would depend very largely on dimension, wouldn't it?

The Witness: Yes, sir, it is the standard type, and I have not got the figures with me on the dimensions of the oven itself.

Q. By standard types, you mean the types that Koppers is going to make?

A. No, is making now, it is the same size oven, exactly, as every other Koppers oven made in this country, the same as at Clairton and Gary, and Pittsburg, all the ovens built in the last few years, five 36992
or six years.

Q. How high did you say it is?

A. I think it is 13 feet, relying upon my memory, but I haven't my notes with me.

Q. Is that the usual height of those Koppers combination gas and coke ovens?

A. Well, they run about that. That is not the inside measurement. That is the total height of the oven from the pusher level.

Q. You cannot give the length?

A. No, sir, I cannot give you that now. I am a little confused in my mind whether it is 35 or 46 feet long. 36993

Q. Now, your whole plant in this respect is based on an oven capable of coking 20 tons of coal in 24 hours?

A. Yes, sir.

Q. What gas company in this country is now operating a chamber oven of that kind?

A. Laclede Gas Light Company, not the chamber oven, but is using that same size of oven, and it is equipped so that they can at any time put on the outside producers, and, therefore, make all the gas available for sale, instead of dividing it into a rich

gas and a lean gas. All the ovens that they build now are provided with this double-main system, heating-main system, whereby they can, if they wish, put on producer gas.

Q. Is the distinctive feature of what you call the chamber oven that all of the gas is made available for sale?

A. Yes, sir, in this particular Koppers oven. I went to Koppers because nobody else can make them right here on account of patent suits decided by the Court.

36995 Q. Has Joliet the Koppers oven?

A. Yes.

Q. This new type?

A. Yes.

Q. How long have they had it?

A. That is a smaller oven, though, the Joliet oven.

Q. How large is the Joliet oven?

A. I do not remember now. It is about half, I would say, from memory, if you wish me to give an estimate.

Q. How long have they had these in Joliet, in operation?

A. My best recollection is it is eight or nine years.

36996 Q. Well, do you know how many tons of coal they will coke in Joliet, in 24 hours, in Joliet?

A. No, I do not remember that.

Q. Haven't any approximate idea?

A. You mean the total plant?

Q. No, per chamber, or per oven.

A. No, I haven't that information.

Q. When were you last at Joliet?

A. Two years ago. I have had my assistants there since, helping them out on changing over the system slightly in the heating system.

Q. How many tons of coal in 24 hours do the Laclede chamber ovens coke?

A. My understanding, they do 20 tons, or they could do 20 tons, and have done 20 tons per day, but they do not do that much now, the plant is flexible to that extent that they can fill in 16 hours, 17 hours, 20 or 24 hours, as they wish.

Q. Do you know the dimensions of the Laclede oven?

A. No, sir. They are all the same. The recent installations of Koppers ovens are all the same. I went down to see them last Saturday, to refresh my memory. 36998

Q. How long have they used these chamber ovens, as you say, in Laclede?

A. About four years, three or four years.

Q. But you cannot give anything of the dimensions of the Laclede oven?

A. No, I cannot, sitting right here. I can get it for you, if you wish.

Q. Well, are there any of those chamber ovens in use in the east, of this size, by any gas company? Is there any company producing gas for sale?

A. I believe the Providence is the same size oven.

Q. Well, are the Providence ovens what you mean as chamber ovens? 36999

A. Yes, I understand that is a chamber oven.

Q. Have they had these 20-ton ovens in Providence?

A. That is my understanding, yes.

Q. Have you ever seen them?

A. No.

Q. Have you ever studied any of their operating results?

A. At Providence, no. I was told it was—

37000 Archibald S. B. Little, Cross.

Q. (Interrupting.) Now, isn't it a fact that under this chamber gas type of operation using all of the gas, that you get only an eight or nine candle power, usually eight?

A. Before enriching, you would get more than that.

Q. About eight?

A. More than that, you are taking the plant where they have stripped it, I believe.

Q. No, just as it is produced, using all the gas, is it more than eight, or at most nine candle power?

A. Yes, it would be nearer twelve.

37001 Q. Where has that been done by any gas company, to your knowledge?

A. Well, the Joliet plant of the Western United make more than eight.

The Master: Of your own knowledge?

The Witness: Yes, of course I studied those things every year, sometimes two or three times

The Master: Studied how?

The Witness: They have to file operating statements with the Commission showing what they get.

Q. They are tested by what kind of a burner?

A. Sugg burner.

37002 The Master: How much over eight do they get?

The Witness: They get about 12 candle power, although they are not bound to make candle power at all, it is incidental, and a good deal depends, your Honor—

The Master: Don't they report the candle power?

The Witness: Yes, they keep it.

The Master: Do they report it?

The Witness: Yes, they report it to my system.

The Master: Do they report it in their official report?

The Witness: They are not required to, and I do not think—

The Master (interrupting): Do they report it in their official reports?

The Witness: No.

Q. What would be that candle power flat flame burner?

A. Around 7 or 8.

Q. I notice that you give figures of cost of building these ovens, these chamber ovens, which you say 37004
the Koppers people are going to build, or are building, on the basis of 1914 prices, and on the basis of present prices?

A. Yes, sir.

Q. How do you know what it would cost to build these hundred Koppers ovens?

A. I sat down with the chief engineer of the Koppers Company and worked it out.

Q. He gave you the figures?

A. He gave me the figures, yes. Nobody else on earth could give them except perhaps Mr. Rust, and he would get them from the same source.

Q. These figures which you give are without the 37005
cost of docks, cranes, coal storage, bins, old plant, etc., you did not undertake to figure any of those things?

A. That is correct. I have stated that, because they would be figured on erecting here at Astoria, where they had that apparatus already.

Q. Do these figures of 1914 and present price for building a 100 oven chamber gas plant represent figures that have been given to you?

The Master: He has already answered that.

37006 Archibald S. H. Little, Cross.

Q. Did you get the operation figures from the same source and in the same way?

A. Yes, sir. I furnished Mr. Becker, the chief engineer, with the units, that is the cost of coal, then he figured the balance of it, and in conjunction with me.

Q. When did you get these figures to make up this exhibit which you put in yesterday afternoon?

A. Last Sunday, I went to Pittsburgh to get it.

Q. I notice that you have on your cost of gas figures given what you call the cost of enrichment to 23 1/2 candle power 1.4 gallons of oil. Could you
37007 raise this gas from 7 or 8 candle power to 23 1/2 candle power with 1.4 gallons of oil?

A. Not from 7, no.

Q. You could not raise it even from 12 on 1.4?

A. I figure you could, yes.

Q. On the basis of 6 candles to the gallon?

A. Oh, from 12, no, you could not from 12.

Q. On the basis of 6 candles to the gallon, what would you require to raise from 7 to 23 1/2? That would mean 2 2/3 gallons of oil, wouldn't it?

A. About that, yes.

The Master: And from 12?

The Witness: I figure about 1.9.

37008 Q. Well, tests in this territory are made on flat flame burner?

A. I did not so understand.

Q. You did not so understand?

A. No.

Q. Didn't you go into the testing room at Astoria?

A. No.

Q. And you have made up your figures on the basis of assuming oil at only 6 cents?

A. In the same way that I did before. I did not say that that was fair or reasonable or unreasonable.

Q. These figures of $1.65 per ton of coal for conversion charges, were those figures given to you by this chief engineer?

A. Yes, sir; and they were checked by Mr. John Drewson, the superintendent in charge of the Seaboard By-Products Coke Company, who was present at these meetings, and who has built and operated coke plants at I think seven different places in the United States.

Mr. Ransom: I move to strike out the part of the answer with respect to what this Mr. Drewson did. 37010

The Master: I think you better leave it in. The more of that you have in, the less valuable Mr. Little's testimony is on this point.

Mr. Ransom: All right.

Q. Now, this Koppers Company is not in the gas business, in the sense of supplying gas?

A. No, only incidentally.

Q. As they are makers and sellers of these coke ovens?

A. Incidentally. They own and control the Seaboard and furnish gas to the Public Service Company of New Jersey, and at other plants they do about the same thing. 37011

Q. These figures under income in this skeletonized statement on coke, $7 per ton, that is net proceeds, I assume?

A. Net, yes.

Q. You got that from the Koppers Company?

A. No, it is $9 less $2 a ton for handling.

Q. You got a net figure?

A. I used it myself, they thought it should be more.

Q. Have you ever sold coke in this neighborhood?

A. No, sir. I have studied that matter somewhat.

37012 Archibald S. B. Little—Cross

The Master: Quite a little difference between studying something and selling it, isn't it?

The Witness: Yes, sir.

Mr. Ransom: I move to strike out this statement of yesterday, on the ground that it is almost all hearsay, secondary evidence.

The Master: I think I can dispose of it when I decide the case. I will deny the motion at this time.

Mr. Ransom: It relates to speculative matter, apparatus that has not been fully tried out, something that somebody is building or going to build
37013 or going to use, and that this witness has not such a knowledge either of the cost of figures as to the building of the plant, or as to the expenses and income, as he calls it, of gas made pursuant to it, as to make it of any value or aid bearing on any issue in this case, and that with respect to a number of matters it appears that the statement is inaccurate and unreliable.

The Master: I will deny the motion.

Mr. O'Brien: That is the way Mr. Alten S. Miller sells you gas holders and other equipment so-called, the Bartlett-Hayward and other concerns, you can buy it entire or buy it piecemeal.
37014 Q. How many charges a day would you put into these chamber ovens?

A. One every 17 hours.

Q. That is 17 hours for the coking time?

A. Coking time, yes, sir.

Q. How did you reach the conclusion that this would coke 20 tons net in 24 hours, and thereby yield the make of gas which you assume?

A. I have endeavored to state that that was after a conference with these two men, and after studies that I have made of coke oven plants at Woodward, Ala-

lama, Joliet, Illinois, outside of the gas plants there, the coking plant at Gary, Indiana—

Q. (Interrupting.) Well, I mean gas plants.

Mr. O'Brien: Just a minute, Judge. Go ahead and finish the answer.

Mr. Ransom: Well, he is answering.

The Master: Let him finish his answer.

Mr. O'Brien: They try to cut the whiskers off these answers every time.

The Witness: And at many other places.

Mr. O'Brien: It leaves a crippled record, your Honor, with the dashes at the end of the 37016
answers.

Q. State any gas companies—

Mr. O'Brien (interrupting.) Go ahead, from Gary on.

Q. (Interrupting.) Gas companies I have been asking him about.

The Master: Read the testimony.

(The testimony was read by the stenographer.)

The Master: Now, you would say, in answer to Mr. Ransom's questions as to how you got the quantity of gas to be produced, and so on, that you got it after your talks with these two men, and from your inspection of plants at Woodward, 37017
Alabama, Gary, Indiana, and what else were you going to say, if Mr. O'Brien would let you?

The Witness: And other places, I stated, your Honor.

The Master: I thought you had finished that. Now, go ahead, Mr. Ransom.

Q. Is the Gary plant a gas company operating a chamber oven?

A. No, it is a coke oven, but it could be operated.

Q. In connection with the steel company?

37018 Archibald S. B. Little—Cross.

Mr. O'Brien (interrupting): There you are again.

The Witness (continuing): It could be operated as a chamber oven. There is no difference between a chamber oven and a gas oven.

The Master: A good deal of the trouble arises out of Mr. Little's insistence on saying something more than the question calls for. Now, I will restrict his answers to the question. Go ahead.

Q. Birmingham, that is a coke oven and not a gas
37019 plant making gas for sale?

A. Yes. Did I say Birmingham?

The Master: No, Woodward, you said.

Q. Woodward, well, that is in connection with the Birmingham District, isn't it?

A. It is near Birmingham.

Q. That is called the Birmingham District.

The Master: Well, that is not important. It is near Birmingham.

Q. Well, is there any difference between a coke oven as used at a steel company, and a chamber oven of this sort, which you say the Koppers Company is going to make?

37020 A. In the oven, no.

Q. You say no difference in any part of the oven?

A. Not in the oven, no.

Q. Any difference in the regenerator system?

A. No.

Q. In what parts are the differences if any?

A. In a chamber oven there is an additional equipment provided, which is sometimes put on coke ovens also, whereby you can add producers which will make heating gas for use instead of using part of the gas produced on the ovens for heating the ovens.

Q. What is that addition called?

A. Including the producers? That is included in the estimate, and is in there to the extent of about $600,000 on the present prices.

Q. Well, producer gas is gas around 135 B. T. U.'s, isn't it?

A. It varies. You can get producer gas of that value, yes.

Q. Isn't that the usual B. T. U. quality of producer gas?

A. No, it runs down as low as 80, which is bad, and around higher than you have stated.

Q. How much higher? 37022

A. Oh, about 10 B. T. U.'s, possibly.

Q. Producer gas runs 80 to 145 as the maximum?

A. About that, yes.

Q. Now, on these chamber ovens, I am not sure whether you gave the figure or not. How much coal did you say you used per charge?

A. That could be figured out from the capacities.

Q. Don't you know?

A. No, I don't know it offhand right now.

Q. That is, you have given figures for a plant which you don't know, in operating, how much coal even you would put in for a charge?

A. You would fill the oven up to within eight inches 37023
of the top.

The Master: How much coal would that take?

The Witness: I have stated it in a different way.

The Master: State it this way.

The Witness: I can't do it here and now.

Q. You can't figure it out here?

A. No, sir.

Q. How do you propose to heat this chamber over?

A. With producer gas.

Q. What?

A. With producer gas, using part of the coke produced on the oven for making the producer gas.

Q. By the way, do you know how much coal they use per charge in Joliet?

A. I cannot state it from memory, no.

Q. Or Laclede?

A. Maybe I have the Laclede figures (examining papers).

Q. For chamber oven operation?

A. Well, Laclede is not a chamber oven, it is not operating as a chamber oven.

37025 Q. You can't tell how much coal per charge is used anywhere on a chamber operation?

A. Not sitting here, no.

Q. And the chief engineer did not give you that figure of this Koppers Company?

A. Yes, he gave it to me, but I have forgotten what it was.

Q. Now, the carbonizing period when using oven gas for fuel, what will it be, and the carbonizing period when using producer gas?

A. No difference.

Q. Well, what will it be?

A. Seventeen hours, I have stated.

37026 Q. What kind of producers have you in mind?

A. Koppers.

Q. What is the name of that producer?

A. I do not think it has any name but the Koppers producer. They make it themselves, according to their own designs.

Q. Well, do you know of any chamber oven in the country that is making and sending out 22 candle power gas?

A. Not now, no.

The Master: This is the plant that will cost about nineteen million dollars to put up?

The Witness: No, sir.

Mr. Ransom: Not this one, this is different.

The Master: How much will this one cost, according to the estimate these men gave you?

The Witness: The present price eight million dollars.

Q. Your figures here, I notice, give an increase of, from the 1914 prices to the present prices of 113 per cent?

A. What is the question?

Q. If these are the same type of ovens essentially that you have referred to in your coke-oven figures, why should the increase in price on the coke-oven 37028
plant be 113 per cent instead of 90 per cent, as you told the Master yesterday, of 1914 to the present time?

A. I will assume that I told the Master that, but I do not remember on the coke oven.

Q. Well, you said eight million to fifteen million dollars yesterday, didn't you?

A. I think I said eight to sixteen, didn't I, your Honor? The record will show of course, but I can answer it possibly briefly by stating that a chamber oven has a greater proportion of brickwork in it to the total cost than would a coke-oven plant, because it hasn't the divided system of mains. 37029

The Master: Well, all of this coke-oven scheme blows up as a matter of fact, if you cannot sell the coke, doesn't it?

The Witness: Certainly.

Q. Well, if this is built like a coke oven, why is there more brickwork about this chamber oven?

A. Not more brickwork: there is more proportionately of brickwork to the total work in the ovens, as I stated there, and more hydraulic mains.

The Master: I am not going to limit cross-examination so far as counsel for complainant

37030

deems it necessary, but I think it is only fair to state on the record that I do not believe that by any possibility I can ever be induced to report in favor of a proposition requiring this company to put eight, ten, twelve or fifteen million dollars into a coke-oven system for producing gas, when the whole thing depends on the ability to sell coke, with all of the dangers that that carries with it. I do not think it can be done; I do not believe the Court would ever require it.

Mr. O'Brien: There is no evidence in this case as to the dangers connected with the sale of coke, your Honor.

37031

The Master: Yes, there is. So far as I am concerned, I should never report in favor of any such speculative bases of producing gas.

Mr. O'Brien: But, your Honor, if it depends upon the sale of coke here, it depends upon the sale of coke everywhere, and I would ask your Honor to keep your mind open on that.

The Master: I am expressing my views about it.

Mr. O'Brien: Well, you are just putting up your view hastily drawn in this case.

The Master: No, it is not hastily drawn at all.

Mr. O'Brien: Against the views—

37032

The Master (interrupting): Counsel might just as well stop making those statements that I hastily draw any conclusion. I have heard about coke-oven gas since Mr. Addicks was on the stand and you cross-examined him, and I have heard about the possibility of selling coke in this market. Now, it is not anything new to me, it is six months old, this coke oven situation.

Mr. O'Brien: Your Honor, has any proof been offered here to justify the lethargy, the inactivity and the indifference of the National Coal & Coke

37033

Company? Does your Honor assume that with the price of—

The Master (interrupting): I am not here to argue with you, Mr. O'Brien.

Mr. O'Brien: I know, but you have expressed your opinion, and I say—

The Master: I have made a statement, based on Mr. Little's testimony, that the whole question of coke oven gas depends upon the ability to sell coke, that my impression is that it would take a great deal of testimony of a great deal more weight that has yet been presented to ever lead me to report that this Gas Company ought to 37034
scrap any part of its plant and attempt to raise or put into coke oven plants anything from $8,000,000 to $15,000,000 upon the speculation that it could make gas cheaper by selling its coke. Counsel for defendants are not to be misled by anything I have said, but will use their own judgment as to how far they want to cross-examine.

Mr. O'Brien: You mean counsel for the complainant.

The Master: Counsel for complainant, yes. I do not want to mislead them.

Mr. O'Brien: I just want to say, though, that you brought the subject up, and before you make 37035
any finding you have got to reconcile your judgment concerning which you have now given some impression with the engineering judgment of such companies, and such large companies, as have concluded to adopt this method of making gas.

The Master: Go ahead, Mr. Ransom.

Mr. O'Brien: Another thing that is bound to come, as was expressed by Mr. Addicks in the report of the committee to which I called your attention earlier in the case, made in 1914, that

the then rising price of gas oil meant that they would have to go into the coal gas system of making gas, and if on all the evidence in this case your Honor concludes that the price of gas oil may rise to a prohibitive figure, why, you have got to determine then what the obligation of the company is, and you have got to go back to the time when the price of gas oil has begun to increase and when the representative of the Gas Companies, including Mr. Addicks, became alarmed at the price of gas oil. All those things
37037 enter into this situation and I want, now that you have brought it up, so that you will not let that impression that you have just expressed, grow on you, I want to call to your attention, your Honor, that the burden is not on the defendant to measure up each of these methods of making gas and determining whether, in the time allotted to us during the trial of this case, that company should adopt this, that or some other method.

The burden is on this complainant to cover all of that, because the statute is silent on the method of making gas. It may be natural gas, it may be any kind of gas, it is up to this company to de-
37038 termine or prove by the burden of proof in this case all of the various matters, and the testimony of the witness calls your Honor's attention to these various methods that are being indulged in of making gas and, the presumptions that will grow from that, that is a burden that the plaintiff has got to assume in this case.

The Master: Well, let us go ahead.

Q. Mr. Little, any of these plans of making gas by the coke oven or chamber oven method depends, in the first instance, upon an ability to get an adequate supply of coal of the right kind, and at a proper price?

A. Certainly.

Q. Have you ever made any studies of the difficulty experienced by this complainant, and by other Gas Company in this vicinity, this year and last year, and in recent years, in obtaining the quantity of coal which it needed and desired.

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial. There is no proof before this Court as to any difficulties of this company and other companies in getting coal.

The Master: Objection overruled.

Mr. O'Brien: Exception.

The Master: Have you made any study of it? 37040

The Witness: I have not made a study of it, your Honor. I have known of difficulties.

Q. Did you learn, as has been indicated by the testimony in this case, that of the 2,830,000 tons contracted for by this company during the past five years, it was able to get only 1,806,934 tons, or less than 64 per cent of what it contracted for and needed?

Mr. O'Brien: Your Honor, I object to that as the same error is being committed all day, in the questions put by the witness Ransom, reading into this record these assumptions and giving testimony.

The Master: Let me hear that question. 37041

(The question was repeated by the stenographer.)

The Master: I think it is argumentative, that is all. You won't get us anywhere, the witness will say no, he did not learn it.

Mr. Ransom: He may have read Mr. Gawtry's testimony.

The Master: Well, let us hear the answer.

A. I did not read that part of the testimony.

The Master: See, that gets us nowhere.

Mr. Ransom: I think it gets a very great deal. Here it is right in this case.

37042 Archibald S. F. Little, Cross.

The Master: Oh, the testimony is there.

Mr. Ransom: Available to the witness.

The Master: Yes. And you have a perfect right to say, "suppose," as the testimony indicates, you were only able to get 64 per cent of the coal you contracted for in five years, would that change his statement about establishing a chamber oven gas plant.

Mr. O'Brien: Your Honor, can't you see the fatal errors in that whole assumption?

The Master: No.

37043 Mr. O'Brien: Well, there are, there are three or four missing links there, they might contract for all kinds of coal.

The Master: The answer to that is that they did contract, and did not get it.

Mr. O'Brien: They contracted for gas oil, too.

The Master: Simply another way of putting the question.

Q. Supposing that the company during the past five years had been able to get from the Coal Companies only 64 per cent of the coal which it needed, or believed that it needed, would you still, in view of that fact and other facts known to you as to the difficulties

37044 in getting coal, advise the addition of 1,000,000 tons of coal a year to the coal requirements of this company?

Mr. O'Brien: I object again to the question.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Q. Would you?

A. Does that refer to bituminous coal, or to all coal?

The Master: Both.

Q. Coal for coke oven operations bituminous coal?

A. It would not change my opinion, no.

Q. If it were anthracite?

A. All the more need then of building the coal gas plant.

Q. Coke oven operation takes more coal for gas made than a coal gas plant, doesn't it?

A. A straight coke oven, yes, but a chamber oven, no.

Q. Well, how many times more of coal does what you call a straight coke oven, require of coal, in proportion to make, compared with the coal gas plant such as Astoria A?

A. Almost twice.

The Master: And how much more would it be in the chamber oven requirements, if any?

The Witness: Not any, your Honor. 37046

The Master: The same quantity?

The Witness: Same quantity, yes, sir.

The Master: That is based on figures given you by the chief engineer of the Koppers Company?

The Witness: No, sir, it is based on my experience as well as upon figures given by him.

The Master: Well, part upon figures given by him?

The Witness: Partly, yes, sir.

Q. And it would require in addition to the coal about 2 2 3 gallons per thousand feet for enrichment? 37047

A. If you used gas oil, yes.

Q. Have you made any studies of the difficulties in obtaining in this territory the kind of coal that would be needed for the operation of coke ovens?

A. Only to the extent of visiting the Seaboard plant, across the meadows.

Q. Have you heard that they have had very great difficulty in getting suitable coal and proper quantities of coal?

A. I knew that they had some difficulty, as well as other companies.

37039 Archibald S. B. Little, Cross.

Q. Very serious difficulties?

A. It was serious trouble everywhere to get coal.

Q. Have you formed any estimate of the available coal supply from sources ordinarily coming into the New York market, to be able to reach a conclusion whether you could supply this one million tons more a year without bringing coal all the way from the southern fields?

A. It could be done very easily. I have made inquiries about that.

Q. Without bringing southern coal in?

37040 A. Yes, sir.

Q. Where did you make those inquiries?

A. I have made studies of the production of coal as gotten out by the Government.

Q. Is that your only source of information in that respect, or your principal source?

A. That is the principal source, I would say.

Q. Have you been familiar with the experience of local gas and electric light and other public utility companies in getting the Government to allow enough coal to come in to New York for local public utilities to meet even their demands under present methods of operation?

37050 Mr. O'Brien: I object to that, your Honor, as embodying assumptions that are not in the proof.

The Master: Overruled.

Mr. O'Brien: Exception.

A. It is difficult to answer that question because of the inclusion of other utilities, like Electric Light Companies, because they do not use this kind of coal.

Mr. O'Brien: In fact, the Edison Company, according to the newspapers, have gone over to fuel oil.

The Witness: I know enough of it to say this, that no gas utility ever suffered inconvenience

through not being able to get coal because, they were on the preferred list all through the war, and after the war, and during the strike.

Q. Don't you realize that the priority order was changed not long ago in that respect, so far as Gas Companies were concerned?

A. Very recently it has been changed.

Q. Within ten days?

A. Well, I don't know of it then.

Q. Do you know whether there are harbor facilities in New York for handling from the cars and bringing about the delivery of one million tons more of coal 37052
for coke plant purposes?

A. I looked into that question.

Q. As to New York?

Q. As to New York, and obtained a map showing all the different ports in the vicinity through which coal could be handled.

The Master: Mr. Ransom is talking about lighterage facilities.

Q. Lighterage facilities?

A. I do not know that there is.

The Master: Have you any idea whether you could lighter that much additional coal in this harbor? 37053

Q. Isn't it a fact—

A. I have.

The Master: You think you could.

The Witness: I think I could, yes. Not that I could, but I think somebody could.

The Master: You think there are lighterage facilities in the Harbor of New York for an additional million tons of coal?

The Witness: There might not be right now, but—

37054 Archibald S. B. Little, Cross.

The Master: You could get out and buy some lighters, I suppose?

The Witness: Yes.

Q. My question related to the facilities for unloading from cars. Isn't it a fact that there are only three ports, Arlington, Port Reading and South Amboy which handle gas coal?

Mr. O'Brien: I object to that, that is not in this record, your Honor.

The Master: We will just have the answer to that, and then we will hear Major Clark.

37055 The Witness: I know of those three ports. I do not know of any others.

The Master: Do you know of any others?

The Witness: I do not.

Mr. Clark: I have made a request for certain specific petty cash vouchers to be produced here, and when I have asked whether they were pro-produced, they produce about several thousand petty cash vouchers and said I could pick them out. I would like to have the specific ones which I have named in the letter which I have given to Judge Ransom.

The Master: Well, send somebody up to the

37056 Gas Company in the morning to pick them out.

Mr. Ransom: We have had them here in a taxicab for two days, and he would not even come here to see them.

Mr. Clark: They are under a subpoena, and they did not give me the vouchers I asked for.

The Master: Then do what you are entitled to do.

Mr. Clark: Well, they bring out the bunch, and not the ones we ask for.

The Master: Well, serve a subpoena.

37057

Mr. Ransom: We have produced, so far as we can, the precise vouchers, and all vouchers asked for.

Mr. O'Brien: Note what time we are adjourning, three minutes past six.

Mr. Chambers: And last night ten minutes before six.

Mr. O'Brien: It is over my protest, of course, that we sit from nine-thirty to six on a holiday, and tomorrow I would like to know about how long, if Judge Ransom will say, he will take with cross-examination?

Mr. Ransom: I expect to finish with Mr. Little 37058
in about an hour.

Mr. O'Brien: Well, your Honor, at that time will you allow me a recess as to the re-direct?

The Master: No.

Mr. O'Brien: This staying here so late—

The Master: No, you will have to go on with your re-direct, I am going to finish it up.

Mr. O'Brien: Will you allow the presentation of some other witness, which was a consideration that was granted repeatedly to the complainant?

The Master: Not on re-direct, not re-direct.

Mr. O'Brien: Wherever they wanted, they had recesses, and other intervening time. 37059

The Master: No, we will go right ahead with the witnesses.

Adjourned to Friday, February 13, 1920, at 9:30 A. M.

Last Complainant's Exhibit 467.
Last Defendants' Exhibit AA-390.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 37063

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, February 13, 1920.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 37064
MR. O'BRIEN, of Counsel for defendant Swann.

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Mr. Clark: Before we start, I would like to call for the production of the 1909, 1910 and 1911 ledgers for my witness Cohen.

The Master: Yes.

Mr. Chambers: Are we open for business now? 37065

The Master: Yes.

Mr. Chambers: I would like to ask to have it noted upon the record—

The Master: We would have been ready for fifteen or twenty minutes if I had known you wanted anything. You did not have to wait for Mr. O'Brien to do this.

Mr. Chambers: I would like to state upon the record that I would like to have the Master impound what is known as the original Rowland report and the copies that were offered in evidence.

37066 Archibald S. B. Little, Cross.

The Master: I refuse to do it.

Mr. Chambers: Exception. It may probably become very useful hereafter in some phases of the case, and I would like to have produced again here in court the underlying data to the Consolidated Gas Company's opening journal book once more so that we can take another look at it.

The Master: All right. Where is Mr. Little?

ARCHIBALD S. B. LITTLE, resumed the stand:

37067 CROSS-EXAMINATION CONTINUED BY MR. RANSOM:

Q. Mr. Little, in this statement, "Proposed By-Product Coke Oven Plant," and also your statement as to what you call chamber ovens which you made up a few days ago, you have assumed a price for coal of $5.28 per ton?

A. Yes.

Q. That is the price as of what date?

A. The average price for the first eight months of 1919.

Q. That price of $5.28 is a price delivered into the coal pile, according to your calculation?

37068 A. Yes, sir; that is a net ton.

Q. Delivered into the pile. How much, in your figure, did you allow for delivery into the pile, is it fifteen cents?

A. No, it is 19.408 cents.

Q. That is 19.408 cents?

A. Yes, for a gross ton; then I afterwards reduced it to the net ton.

Q. Well, how much per net ton?

A. There is 2,240—

Q. Have you reduced it?

A. Yes, it is all set out in detail on page 6 of Section 2. I used the same figures for the inclined plant coal.

Q. It is about seventeen cents?

A. About that, yes.

Q. In other words you took a price which you say the Consolidated was paying, or the Astoria was paying, under that old five-year contract with the Pittsburgh Company?

A. Well, it is whatever your books showed for the first eight months of 1919; I took it off the books.

Q. Have you made any inquiry to find the price 37070
you paid, or the present costs of coal and prices during the latter part of 1919 and the early part of 1920?

A. Since this was made up I have seen some of the minutes which were introduced in evidence, which bear upon the cost of coal. That is the only information I have.

Q. Well, I show you various vouchers (handing papers). Have you—

Mr. O'Brien: These vouchers are not in evidence, are they?

Mr. Ransom: They are part of the underlying data of things that are in evidence. 37071

The Witness: Yes, sir.

Mr. O'Brien: Well, you just showed them to him.

The Master: Will you please keep your seat.

Q. Are you able to state the present price of Westmoreland coal alongside?

A. I assume that this is Westmoreland.

The Master: Don't assume anything. If you don't know say so. Judge Ransom has shown you some vouchers. If you cannot tell from looking at those vouchers what the price of Westmoreland coal is, say you don't know.

37072 Archibald S. B. Little, Cross.

Q. Some of the vouchers are Westmoreland?

A. Quite a number, your Honor, but I have not looked all through them yet.

The Master: Well, take your time. You are not bound by those vouchers anyhow, unless you are willing to assume they are right.

The Witness: Yes, there are a number here showing Ocean Westmoreland coal 3/4 inch run of mine. I could determine the price from these.

Q. Well, what is the price?

Mr. O'Brien: I object to the question as in-
37073 competent, irrelevant and immaterial, on the ground that these vouchers have not been proven, or the contracts have not been proven.

The Master: The objection is overruled. The witness says he can tell what the price is from these papers. I do not care what they are.

Mr. O'Brien: He said he could figure out the price as shown on these vouchers.

The Master: He said he could tell the price of Westmoreland coal by these vouchers.

Mr. O'Brien: That is the great danger of your Honor paraphrasing what he has said.

The Master: I went out of my way to explain
37074 the situation to the witness, and he says he can give us the price of coal, and I will let him give it.

Mr. O'Brien: Your Honor, he said if he looked through all of them, he could figure the price shown on these vouchers.

The Master: The record shows what he said. Go ahead, Mr. Little.

The Witness: The average price per gross ton, as shown by the vouchers, reading particularly from one of September 12, 1919, for a thousand tons, including insurance, delivered alongside, as stated here, $5.95505 per gross ton.

Mr. O'Brien: Does it say gross ton on these bills?

The Master: The witness will not answer that question. This is not the time for Mr. O'Brien to examine. That is not the way to prove the price of coal, Judge Ransom.

Mr. Ransom: What is that?

The Master: That is not the way to prove the price of coal. Don't waste any more time on that.

Mr. Ransom: I am trying to find out what the witness knows. 37076

The Master: He don't know anything about it.

Mr. Chambers: Not these, any more than anybody else does.

Q. Are you willing to say it is not a fact, Mr. Little, that, for example, during the latter part of 1919, and thus far in 1920, the price for this kind of coal that you have assumed at $5.28, is around $9.00?

Mr. O'Brien: I object to it as incompetent, irrelevant and immaterial.

The Master: Objection overruled.

A. No. 37077

The Master: Well, do you really know what the price of that kind of coal delivered alongside is now in New York?

The Witness: I know from this. I can say from these vouchers, these invoices, your Honor.

The Master: Otherwise you don't know anything about it?

The Witness: Not other than I have stated, no.

The Master: So that your figure of $5.28 is based on what?

37078 Archibald S. B. Little, Cross.

The Witness: May I explain, the $5.28 is a net ton; this is based on a gross ton.

The Master: What is the $5.28 net ton based on?

The Witness: Based on the actual price paid during the first eight months of 1919, which are all the figures which I have.

The Master: But you don't know what it has come to since?

The Witness: No, sir, until right now.

The Master: Do I understand you are assuming now that it is pretty close to $6.00?

37079

The Witness: According to these invoices, yes.

The Master: That is all you know about it?

The Witness: Yes.

The Master: Go ahead.

Q. On the basis of the—

The Master (interrupting): Well, do you believe that figure to be substantially correct now?

The Witness: Yes.

The Master: From any knowledge you have?

The Witness: Yes, I have some knowledge of gas coal—a good deal.

37080 Mr. O'Brien: What would that figure be, that gross ton figure there, what would the price be a net ton at that gross ton figure?

The Master: You are not in order, Mr. O'Brien, question not allowed at this time.

Mr. O'Brien: Some of these little things might be cleared up as we go along.

Q. On the basis of the figures you have made in this coke oven plant tabulation, and so on, an addition of a dollar in the cost per ton of coal amounts to about 16 2/3 cents per thousand in the cost of gas, as you figure it?

The Master: What is this, coke oven?

Mr. Ransom: Yes.

The Witness: That does not sound right.

Q. Well, figure it up?

A. It would be nearer ten cents a ton.

Q. What factors do you use in that calculation?

A. I used the tons and the dollar and the 11,000 feet of gas coming from a ton. I think perhaps you are figuring on the—

The Master: Gross ton?

The Witness: No, he is figuring on the coke oven, where half of the gas would be used in the 37082
ovens.

Q. Well, I am speaking about the by-product coke?

A. Oh. Well then, you are about right.

Q. It is on the coke oven plan. It would be a difference of a dollar would make a difference of about 16 2 3 cents per thousand in the cost of gas?

A. On the straight coke oven, yes.

Q. And on the chamber oven your figure is about ten cents?

A. Yes.

Q. Now, from what source did you get this assumption of yours, that the average cost during the first eight months of 1919 on the grades of coal 37083
which you specified was $5.28? Did you rely upon Mr. Sangster's figures?

A. Yes, sir.

Q. Well, have you sheet 14 of Mr. Sangster's exhibit?

A. No, sir, I haven't a copy of his exhibit.

Q. I will show it to you (handing papers). Let us take Ocean Westmoreland, average price first eight months of 1919, $5.9240, is it not?

A. Westmoreland, yes.

Q. For twelve months, 1918, $5.9375?

A. Yes, sir.

Q. Now, you specified Fairmont, the average price for the first eight months of 1919 according to sheet 14 of Mr. Sangster's tabulation is $5.8560.

The Master: Is that right?

A. Yes.

Q. Straight Westmoreland first eight months of 1919 $5.9159?

Mr. Chambers: Why is it necessary to repeat all those in the record? They are in.

The Master: Probably the basis of a question.

37085 Q. The Ocean you did not specify. But this $5.4833 average on total coal purchases, $5.7280?

A. Yes, sir, and there was an adjustment here, too.

Q. And an adjustment, owing to the situation arising out of the pool, an adjustment average for the first eight months of 1919, all coal of this kind, $5.8247. Now, I ask you from what source you got this assumption of $5.28 for the first eight months of 1919?

A. I took that from Mr. Sangster's figures; but I wish to say that the comparisons are not quite right, when you say $5.28 per ton. That is my net ton, and

37086 the figures you show me are per gross ton. I used a total from his statement No. 4, that is the way he had his working papers before they were typed.

Q. Pur that does not include any discharging into the pile?

A. His figures. I could not say right off from that—looking at that statement, whether it does or not.

Q. Now, the second factor in a coke oven plant is the ability to dispose of coke, and ability to dispose of it at a reasonable price, is it not?

A. Yes, sir.

Q. Now, this plant involves, or this by-product coke oven plant, in addition to calling for 1,090,909 tons more coal, calls for the sale or disposal of 730,909 tons more coke.

Mr. O'Brien: Judge, where do you get that figure of 1,090,909?

Mr. Ransom: Sheet 2 of his by-product coke plan.

The Witness: It calls for that total use of coal to produce the amount of gas shown on my exhibit.

By the Master: 37088

Q. Well, it calls for that total amount of coke to be sold as a result of this operation?

A. Yes. May I say that the judge says, "More coal." I do not know what he means.

Q. Well, it means if this plant in addition to the other plants were operated, that they are using—

A. Well, he might shut down some of the others.

Q. If he did not it would be in addition. But at any rate, you would have 700,000 tons of coke to sell?

A. As shown on Sheet 2 of my exhibit, yes, less what you sell at some of the other plants now.

Q. Yes 37089

Mr. Ransom: You have assumed what net proceeds from this coke.

Q. Where are you going to sell it first, before you assume that proceeds. Where is the field for sale?

A. The field is New York City, around New York City, all along the Atlantic seaboard.

Q. Well, how much of it is sold, do you think, in New York?

Mr. O'Brien: I object to that.

A. None sold at the present time, your Honor. But all of it could be sold in New York City.

Q. To whom?

A. To bakeries, baths, domestic uses; principally for domestic uses.

Q. What makes you think so?

A. My knowledge of conditions in other large cities where this same problem has come up.

Q. When did you first come to this country?

A. 1906; and in 1908 I wrote an article on this subject of coke ovens for the Journal of Gas—

Q. That is easy enough to write articles. I remember when I was a boy there was a lot of coke
37091 carted through the streets and apparently offered for sale and I have not seen any in thirty years, and I was wondering why—

Mr. O'Brien: I will tell you why.

The Master: No, I am asking the witness if he knows.

Mr. O'Brien: But I am going to object to your indulging in this kind of argumentation with the witness.

The Master: I am not arguing with the witness.

Mr. O'Brien: Yes, you are; you are taking one end of that argument and trying to prove to
37092 the witness that he is wrong.

The Master: I am simply asking why coke has not been generally sold in New York in the last thirty years.

Mr. O'Brien: That is a question the Gas Company has got to answer, your Honor.

Q. Can you answer that, Mr. Little?

A. I will do my best, your Honor.

Q. Well, do you know anything about it?

A. Yes, I know a good deal about coke market conditions. Not thirty years ago in New York.

Q. What?

A. I don't know the conditions thirty years ago in New York.

Q. That is what I mean, do you know how much coke was sold thirty-five or forty years ago in New York.

A. No.

Q. Right around the city here?

A. No, sir.

Q. Or what changed the—if it were sold?

A. I do not know what was available then.

Q. Well, I don't know what kind of coke it was, but I have a very distinct recollection of seeing a lot 37094
of coke in those days.

Mr. O'Brien: May I make a statement to the Court?

The Master: Yes.

Mr. O'Brien: Can't you see the irregularity of your indulging in that kind of an argument with the witness, and taking one end of the argument and trying to prove to the witness that he must be wrong?

The Master: I am not arguing anything. The record shows I am a human being, with a mind and with a recollection, and I cannot be deaf, dumb and blind. 37095

Mr. O'Brien: Well, it means that you have got a conviction now that you cannot market coke in New York.

The Master: I do not say that at all. I do not know anything about it. All I know is that when I was a young lad around New York I used to see a lot of coke being carted around the streets, and that for a great many years since I have rarely, if ever, seen any coke, and I was wondering whether the witness knew why that was, or what caused the change, and he says he doesn't

know, he was not here, and now we will pass along to something else.

Mr. O'Brien: Well, they had more coal gas plants then.

Mr. Chambers: I think he ought to show what he knows about coke and the disposal of coke.

By Mr. Ransom:

Q. Have you made any extended and careful—

Mr. Chambers: I suggest to the Court that he be allowed to explain.

The Master: And I suggest to Mr. Chambers

37097 that he be quiet now and let Mr. Ransom ask his questions.

Mr. O'Brien: Well, you asked the witness a question a minute ago.

The Master: I have given Mr. Ransom the floor. Go ahead.

Q. Have you made any extended investigation with respect to the efforts to sell coke in this city, and the conditions in this city as to the use of coke and the prices of coke?

A. Yes, sir. Not so very extended. I have made inquiries.

Q. Where?

37098 A. Of William Farrell & Sons, I think, big coal dealers, coke dealers; and I went over to the Seaboard By-products plant, because they were making a lot of coke and it is a new venture, wanted to see what their experience had been.

Q. Was that in 1918 or 1920?

A. 1920.

Q. So you would say that you are familiar with the efforts of the Seaboard people to sell coke in New York City?

A. Yes.

The Master: From what they told you?

The Witness: Yes.

The Master: That is all you know about it?

The Witness: About the Seaboard, yes, and from what I saw of sales contracts they had.

Q. Now, you assume a price here, a net income of $7 per ton of coke for this company if it should go into the coke business and for this quantity of coke?

A. For the large coke, yes, that is, outside of breeze.

Q. Of course, if this company went into the coke business, it could not get a better price than its com- 37100
petitors were selling coke for, could it?

A. Ordinarily, no.

Q. Do you think that the throwing into the market of 500,000 or 700,000 tons of coke would tend to lower the price?

A. No, I do not think so, because anthracite—

The Master: Would it increase it?

The Witness: No, sir. Anthracite is going off in quality, as shown by the deliveries received, and getting worse and worse every year, and coke is a better fuel than anthracite, and it is recommended by the Government for use.

Q. What would you say would be the transporta- 37101
tion charge from the Seaboard plant into the New York market?

The Master: Of a ton of coke?

Q. Of a ton of coke? About 50 cents?

A. About 50 cents.

Q. Certainly not less than that?

A. Not less than that.

Q. Perhaps 65?

A. Maybe 65, yes.

Q. Are you familiar with the price at which the Seaboard has been selling coke?

A. Yes.

Q. Alongside in New York?

A. Yes, I saw that figure. They have sold some to the Consolidated Gas Company.

Q. Do you know the figure?

A. I will try to find it in my note book (examining book). $7.34 per ton.

Q. I show you various vouchers of the—or various bills of the Seaboard By-Products Company for coke?

The Master: Any question in connection with

37103 it.

Q. I ask you whether you are familiar with the fact that coke was sold during 1919 at the prices there shown?

A. To the Consolidated Company, yes.

The Master: What prices are there shown?

A. First invoice $6.55.

Q. That is a gross ton?

A. Gross ton, yes. I was trying to find out if that was delivered or not. F. O. B. destination, 16th of May, 1919.

Mr. O'Brien: Your Honor, I move the last three questions and answers be stricken out, on

37104 the ground that these vouchers have not been proven, we do not know the conditions under which these contracts were made with Seaboard.

The Master: Motion denied.

Mr. O'Brien: Exception.

A. The price in August, August 20, 1919.

Mr. O'Brien: According to these vouchers?

The Witness: Was the same.

Mr. O'Brien: Is your Honor receiving that as evidence of the price of coke?

The Master: I am taking the witness's testimony as evidence.

37105

Q. Did you learn that the price delivered per gross ton in 1919 was $6.55?

Mr. O'Brien: Where?

Mr. Ransom: New York, Seaboard coke.

A. Did I learn from them?

Q. Yes.

A. No. They told me the price was $7.34, under a contract, and they said that was the lowest price they had ever sold coke at in New York City.

Q. Well, I show you various vouchers.

The Master: You see, there is the trouble with all this testimony. Mr. Little does not know the 37106
first thing about it except pure hearsay statements made by the Seaboard Coke Company, and what use is that kind of testimony?

Mr Ransom: I am afraid it is not much use.

The Master: Well, now, you have brought out his knowledge of it. What is the use wasting any more time?

The Witness: I saw some invoices, as well as hearsay.

The Master: I don't care what you saw.

The Witness: All right.

The Master: You never sold coke in this market, you never tried to sell it yourself, and your 37107
information comes from third parties.

Mr. O'Brien: He knows what the problem of marketing coke is, and also what the question of marketability of coke is in New York and every place else in this country.

Q. Well, now, Mr. Little, assuming a price per gross ton of $6.55, and deducting the 50 cents transportation charge you have $6.05 per gross ton, or on a short ton basis doesn't that amount to only $5.40, per short ton?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial, there is no evidence of any such price.

The Master: Objection overruled. There is an assumption in the testimony that I assume will be supplied by proper proof.

Mr. Ransom: It will.

A. Assuming the thing, I could answer.

Q. Yes, assuming the Seaboard sold it at $6.55, with the 50 cents transportation charge makes $5.40 per ton net, for a short ton, or $1.60 less than the
37109 price that you have assumed?

A. I am assuming also the transportation charge that you show, that you ask me to assume, although it shows delivery at destination for $6.55.

The Master: Assuming these figures that Mr. Ransom gives are correct.

The Witness: Yes.

Q. Well, if $6.55 is the price delivered in New York—

Mr. O'Brien: Just a minute. I am going to object to that. Why camouflage it? Why don't you say $6.55 in this voucher of the Consolidated Gas Company?

37110 Mr. Ransom: Well, we will come to the other features of it in a minute.

Mr. O'Brien: Well, we might as well deal face to face in these things.

Mr. Ransom: You mean mouth to mouth.

Mr. O'Brien: I would not be tricky with these questions, that is all. I would be manly about it. You don't get anywhere with it, it does not help your client.

Q. Did you ascertain the price—you referred to Farrell. Did you ascertain the price at which Farrell was sold coke by the Seaboard delivered at the Farrell yard?

A. No.

Q. You did not learn a price of $6.50 in that connection?

A. No.

Mr. O'Brien: I move that it be stricken out, your Honor, it is not a fair way of putting stuff into this record. It was indulged in all day yesterday, and while your Honor can separate the chaff from the wheat, so far as these questions go, it is misleading, it is confusing.

The Master: Overruled, motion denied.

Mr. O'Brien: Exception. 37112

Q. Now, a difference of $1.60 per short ton in the proceeds from coke would amount to at least 17 1/2 cents per thousand in the cost of your coke oven gas, wouldn't it?

A. About that, yes.

The Master: Have you figured anywhere in your estimate of results of the coke oven plant the cost of vending this coke, that is the work that would have to be done, the missionary work, to get people to buy it?

Mr. O'Brien: I object to the question as assuming that you have got to do missionary work to get people to buy coke, and take an exception. 37113

The Witness: I figured $2 a ton.

The Master: You figured $2 a ton for selling expense?

The Witness: Selling and carting, yes.

The Master: Selling and carting?

The Witness: Selling, and if there was any carting $2 a ton over all, for delivery by boat. No, not for carting; outside of cartage.

The Master: Well, do I understand your testimony to be that you figure $2 a ton for selling expense?

The Witness: Selling expense, yes.

The Master: Exclusive of delivery expense?

The Witness: Yes, sir; because delivery is charged extra.

Q. Well, isn't it a fact that the Seaboard allows a differential of $4 between the retail price and the price to the dealer?

A. I do not understand the question.

Q. Well, that they fixed a difference of $4?

A. To the consumer.

Q. Between the price at which they make delivery

37115 to dealers?

The Master: What do you mean, between the wholesale and retail price?

Mr. Ransom: Practically that, I suppose.

A. I would assume that that was reasonable; in other words, they get $4 for it.

Q. Do you consider a conversion charge of $1.50 per ton of coal carbonized good operating results?

A. Which plant?

Q. On your coke oven plant?

A. Yes.

Q. Now, as to the Seaboard, did you learn of the great quantities of coke that they have had accumu-

37116 lated, that they were unable to dispose of?

Mr. O'Brien: Objected to.

The Master: He has already answered all the coke is disposed of.

Q. In New York City?

A. No.

Q. Where, then?

A. They shipped it.

Q. Bethlehem?

A. Yes, the coke and the breeze.

Mr. O'Brien: Have you got the Bethlehem price here?

By the Master:

Q. Why didn't they dispose of it around here?

A. Because they got such a much bigger price from other people.

Q. How much bigger?

A. They got $8.60 a net ton at the plant, including the breeze.

Q. When was this?

A. January.

Q. Of this year?

A. Yes, sir. All they could make, and more if they had it. 37118

Q. Was that during the coal strike?

A. No, sir; away after the coal strike.

Q. How long after the coal strike was it?

A. I think it was January 27.

Q. Well, when did the miners go back to work?

A. They went back three or four weeks ahead of that.

Q. Well, had the people down in Bethlehem been getting coal by that time?

A. Coal, yes.

Q. Yes.

A. Yes, sir. This is coke.

Q. I know it is, but there are a lot of coke oven plants around Bethlehem, aren't there? 37119

A. Yes.

Q. They would not have sent up here and bought coke unless they needed fuel, would they?

A. That is self-evident, I think.

Q. They would not have paid a very high price for it and come all the way here to New Jersey, unless there was some special stress or situation that required it?

Mr. O'Brien: I object to cross-examination by the Master.

37120 Archibald S. B. Little, Cross.

The Master: Objection overruled. I am asking the witness a question.

A. The price paid as I understand it, was because of the shortage of coke and enormous demand for coke all over the United States. The news has been published to that effect by the Steel Corporation, showing the extra tonnage of steel is due to the fact that they cannot get coke.

Q. What was that condition due to?

A. Strikes, accidents and other causes beyond their control.

37121 Q. How long will that last?

A. Nobody knows. It is like other prices, your Honor, it has ups and downs.

Q. Sure. That is the trouble with this proposition. That is the weakness of the suggestion that the gas company enter into this venture, it has these elements of risk, ups and downs.

Mr. O'Brien: Well, how are you going to meet the proposition that they are going to it all over the country?

The Master: I do not know how I am going to meet it yet, but I can see it exists.

Mr. O'Brien: What would you say, your
37122 Honor, if before this case gets to the Circuit Court of Appeals this company shall have gone into that line of business?

The Master: I should say the officers of this company had reached the conclusion that they had to take a chance for reasons of their own, but—

Mr. O'Brien: Well, you can assume a whole lot with these companies preparing for a number of years for a rate case to come back again after they have tried this 80 cent rate into court.

The Master: I still adhere to my judgment that

on a matter of judgment between engineers as to a subject that his elements of doubt and uncertainty and which can be argued both ways, that I do not believe the courts ought to interfere with the judgment of the gas company officials. That is my judgment about it.

Mr. O'Brien: Well, that proposition does not jibe with the rules that obtain in rate cases.

The Master: Well, I think it does.

By Mr. Ransom:

Q. Mr. Little, I would like to ask you this question: Referring to your whole exhibit or statement on by- 37124
product coke oven plant, under such knowledge as you have of New York City conditions, so far as the supply of gas of the company is concerned, the coal situation at the coke situation, would you advise the installation of this by-products coke oven plant?

The Master: At this time.

Q. At this time, by this company?

The Master: At this expense indicated.

Q. Yes.

A. Speaking of the straight coke oven, you mean?

Q. The by-products coke oven plant as shown on these blueprint exhibits?

A. It is very, very doubtful at this time whether it 37125
would be the proper thing to do.

Q. You would not advise it?

The Witness: He says he is very doubtful. What more do you want?

Mr. Ransom: That is all.

The Master: The witness's answer simply indicates what I have said right along, that if a question is put squarely to the witness he means to be perfectly fair in his answers.

The Witness: That is right.

37126 Mr. O'Brien: Your Honor, I would like half an hour—

The Master: No, I won't give it, time is too valuable. You were twenty minutes late this morning. I can't afford it. Everybody was here, Mr. O'Brien, but you.

Mr. O'Brien: Put it on the record, go on and put it on the record.

The Master: I won't give you half an hour, that ends it.

Mr. O'Brien: It cost me $1.75 to get here as early as I did today.

37127 The Master: If you would get up a little earlier in the morning you would get here. You don't live more than a mile from my place, and you are on the line of the subway.

Mr. O'Brien: That is not the point, the question is, whether I will have a fair opportunity to consult with the witness after the close of the cross-examination. All I want is what has been given to the complainant in this case, nothing more.

The Master: Proceed with your re-direct.

Mr. O'Brien: There is no necessity to snap at me like that. The unfortunate thing is we haven't

37128 got a photograph in the record, the Master snapping off in his vehement way that I have got to go on. There are witnesses here that may take up the time of the Court, so there will not be any time wasted.

The Master: The re-direct will proceed now.

Mr. O'Brien: All I need is a very brief time on the re-direct of Mr. Little, and I submit that having spent such a long time yesterday, from 9:30 to 6 o'clock in the trial of this case, that I have not been given an opportunity to confer with my witness, as is necessary. With men present in

37129

court to take up the time of this Court I suggest that I be given half an hour to confer with the witness before I proceed with the re-direct.

The Master: I never heard of such thing as conferring with a witness between the time of the cross-examination and the re-direct.

Mr. O'Brien: The record of yesterday's minutes has been delivered to me and I would like to have a chance to go into the form of some questions as to matters brought out yesterday in the record. The point I am making is that the progress of this case is not retarded, the Court can proceed with the testimony of the witness Cohen, 37130
or some of the witnesses who are in court, and I will have that reasonable opportunity.

The Master: I won't do it.

Mr. O'Brien: Your Honor will recall that witnesses were taken off the stand by the complainant from time to time, long intervals came in between and they were put back on the stand again, and plenty of opportunity given to the complainant—

The Master: The record shows what opportunity was given.

Mr. O'Brien: I have made my request. I think it is a perfectly fair one, and I think I 37131
should be given that chance to run through the minutes before I take up the re-direct. It will save that much time to the Court because the re-direct can be conducted more expeditiously if that is done.

The Master: Application denied.

Mr. O'Brien: I will ask counsel for the complainant to let me have the records in the several proceedings concerning which the witness was catechised. I will state to the Court that I requested last night of Mr. Goetz that he have the minutes of the several proceedings—

37132

The Master: You are not entitled to it.

Mr. Goetz: I understood that what Mr. O'Brien wanted was the papers I am now handing him, the Freeport minutes.

Mr. Chambers: The blueprints the Master said he would require to be kept here.

The Master: What blueprints?

Mr. Chambers: The ones he had yesterday and examined him about.

The Master: Yes.

Mr. O'Brien: Your Honor stated at the time he was catechised that I would have the benefit of the minutes.

37133

The Master: Certainly you have the benefit of the minutes. Get your own copy of them.

Mr. O'Brien: I will ask complainant's counsel now if he wants to take that attitude—

The Master: He states that he does not, but he understood you wanted the Freeport minutes.

Mr. Ransom: If you wanted the other minutes you had several weeks in which to get them. The Freeport minutes and Mr. Little's testimony are both in court.

Mr. O'Brien: I ask if counsel will send for the minutes in the Quincy case and the several other cases that were referred to.

37134

Mr. Ransom: I don't think so, no.

Mr. O'Brien: That is not based on the impossibility of getting them, is it?

Mr. Ransom: It is based on the fact that there is no part of the testimony with which I confronted Mr. Little which he did not confirm, with the exception of one question in which I made an error, in which Mr. Little promptly detected, and I thereupon withdrew my question and put the witness in the proper light.

Mr. O'Brien: Does counsel take the position that he will not furnish us the courtesy, if it is a matter of courtesy of the minutes of which he extracted some lines and some questions and answers?

Mr. Ransom: Counsel requests that you proceed with the examination.

RE-DIRECT EXAMINATION BY MR. O'BRIEN:

Q. When you, Mr. Little, in your last statement spoke about the feasibility or advisability of putting in a coke oven plant at the present time, at the present prices, did you have in mind reproduction cost as of 37136
the present time, or building costs?

A. Building costs, yes.

Q. What would you say as of a period from 1914 to 1917?

Mr. Ransom: I object to that as immaterial.

The Master: I will allow it.

A. The answer would be different entirely.

Q. And you would recommend it, you would have recommended it at that time?

A. Yes, sir.

Q. I hand you Brown's Directory, and ask you as briefly as you can, beginning at page 445, to tell us at what places by-product coke oven plants are in use? 37137

The Master: In connection with gas plants?

Mr. O'Brien: Some of them are. They all produce gas.

Mr. Ransom: I object to the question that it does not relate to by-product—

Mr. O'Brien: This goes to the question of the marketability of coke. We have not contended that this must be domestic use. Our position with regard to the coke is that a lot of the coke that is produced will be used in the plant itself, that there is a domestic market for it if ordinary business

37138

acumen and abilities and energies are exercised in any community; and further that because of the desirability and marketability of this material, this fuel for industries, a market will be created as soon as the coke is produced. Go ahead, Mr. Battle.

Mr. Ransom: I object to the question which relates to by-product coke, or any other kind of coke that is not related to the method of manufacture by a Gas Company.

The Master: I think the cross-examination had relation to Gas Companies producing gas by
37139 coke oven process, and that is the burden of the witness's testimony, that he would have advised prior to January 1, 1918—he said from 1914 to 1917—that this company install a coke oven process in order to get the gas that it needed to supply to consumers. It is not a question of this company going into the coke business, it is a question of this company producing gas at the best possible price. Now, I shall sustain the objection, except as it relates to Gas Companies manufacturing gas by the coke oven process.

Mr. Ransom: I make the further objection that it is not re-direct examination, because I did not
37140 interrogate the witness with respect to what Gas Companies were making gas by this by-product coke oven method. I did it only as to the chamber method.

Mr. O'Brien: This all goes to the question of the marketability of coke, and our purpose is to show you the billions of dollars that are invested in coke oven plants. Now, whether they use the coke as a secondary matter and sell it, or whether they produce it for purposes of fuel primarily, it does not make any difference so far as the question of the marketability of the coke is concerned.

37141

The question of the moneys that are invested in these plants is in this case, the whole thing bears on the marketability of coke, and the cross-examination took up the question as to where you could sell it, how you could sell it and it was not confined to domestic uses.

The Master: I shall sustain the objection except as it calls for the witness's answer as to what Gas Companies make gas by coke oven processes.

Mr. O'Brien: I note an exception to your Honor's ruling. Let me put this in the record in as brief a way as I can, what we propose to show.

37142

The Master: I am not going to let you put Brown's Directory into the record.

Mr. O'Brien: Do not anticipate that I am going to read Brown's Directory in.

The Master: I am not going to let you read any portion of Brown's Directory into the record.

Mr. O'Brien: I am going to make a brief statement of what we propose to show.

The Master: I don't want a statement. Ask your questions and they will show what you propose to show. I don't want any statements as to what you propose to show. Ask your questions.

37143

Mr. O'Brien: I propose to bring out from the witness by questions—

The Master: No, I have told you I don't want you to say what you propose to bring out.

Mr. O'Brien: Will your Honor hear this and rule it out afterwards?

The Master: No. Ask a question. I don't want you to state your purpose.

Mr. O'Brien: Will you permit me to state that I have called the witness's attention to pages 445 to 458 of Brown's Directory, and that your Honor has ruled out such portions of it as may apply to

plants where they do not make the gas for local consumption?

The Master: I suppose that it is utterly impossible for me to have you understand a ruling when I make it. You have made the statement in the record now. Proceed with the question.

Mr. O'Brien: Exception to your Honor's ruling.

Q. Will you take Brown's Directory, Mr. Little and tell the Court in what places the by-product coke oven gas is made and sold by gas companies?

37145 The Master: Where gas companies make part of their gas by the coke oven process, not where they buy it from others.

Mr. O'Brien: That is a close ruling, your Honor.

The Master: I know it is, but I intend it shall be.

A. May I ask your Honor, does that confine me in the case, for instance, in the case of the United Gas & Electric Company of Aurora in which the gas company forms a separate company and owns all the stock in it?

The Master: I will let you include that.

37146 Mr. Ransom: I object to that.

The Master: I will allow that.

Mr. Ransom: The witness does not know whether they own all the stock.

The Witness: Yes, I do. They are under the jurisdiction of the Illinois Commission, and I have to pass on the bond issues.

The Master: I will let you include that. It is practically one company as a means of handling it. Therefore it is just as this company owns the Astoria Company.

Mr. O'Brien: And the National Coal & Coke,

The Master: And the National Coal & Coke Company.

The Witness: In Illinois there is the Western United Gas & Electric Company, headquarters at Aurora, with ovens at Joliet.

Can I give a plant under construction?

The Master: Yes, I will let you state plants under construction.

The Witness: Plant under construction, the St. Louis Coke & Chemical Company, Granite City, Illinois.

The Master: That is a gas company? 37148

The Witness: Yes.

The Master: Just building its plant for the purpose of making its gas to be sold to the public?

The Witness: It is connected with the gas company, they are all combined.

Q. How many ovens are in the Aurora Company?

The Master: Let him finish his answer first. He is naming the companies.

Mr. Ransom: I object to this. There is nothing here which shows any such thing. That company apparently is purely a coke and chemical company. 37149

The Master: You will have your chance to cross-examine.

The Witness: North Shore Gas Company of Waukegan, Illinois.

Mr. Ransom: This is all over my objection and exception?

The Master: Yes.

The Witness: The Citizens Gas Company of Indianapolis.

The Central Indiana Gas Company, Muncie.

Indiana Coke & Gas Company, Terre Haute, Indiana.

Laclede Gas Light Company of St. Louis.

Philadelphia Suburban Gas & Electric Company, Chester, Pennsylvania.

Chattanooga Coke & Gas Company, Chattanooga, Tennessee. That is all.

The Master: How many gas companies are there in the United States?

The Witness: About one thousand, large and small.

The Master: Next question, Mr. O'Brien.

Mr. O'Brien: Does your Honor intend to
37151 exclude any of these companies also that are engaged in some other business but sell the gas companies gas?

The Master: I have excluded everything except gas companies who make gas by the coke oven process.

Mr. O'Brien: To illustrate what I have in mind, would you exclude a plant like the Steelboard, that sells gas to a gas company?

The Master: Yes, I am taking gas companies that make their gas by the coke oven process.

Mr. O'Brien: Subject to further evidence as to the affiliation between the companies, I will
37152 ask the witness what Brown's Directory shows as to the New England Fuel & Transportation Company.

Mr. O'Brien: I object to that as immaterial and incompetent.

The Master: Objection sustained. I have permitted the witness to give the names of all the gas companies that make gas by the coke oven process, and included companies such as he mentions, which do it through a subsidiary company.

Q. I hand you this Brown's Directory against, page 449, and call your attention to those plants that are in

Massachusetts, and ask you if the company therein named is a subsidiary of the Boston Consolidated Gas Company?

Mr. Ransom: I object to that as incompetent. The witness does not know.

The Master: Unless he knows of his own knowledge the way he does about the Illinois Company, that the gas company owns all the stock of the company to which you refer, I will not allow it.

Mr. Ransom: I object to it as immaterial and having no relation to the case. 37154

The Master: Do you know whether or not the Boston Consolidated Gas Company owns all the stock of this company to which Mr. O'Brien has called your attention?

A. No, sir, I don't know it of my own knowledge.

Mr. O'Brien: I didn't say all the stock, I said a subsidiary.

The Master: I won't take it.

Q. Do you know, Mr. Little, whether the Boston Consolidated Gas Company and the New England Fuel & Transportation Company of Boston are owned by the same holding company?

Mr. Ransom: I object to that as incompetent. 37155

The Master: I will allow the witness to say if he knows. Of your own knowledge do you know?

The Witness: Of my own knowledge I could not say.

Q. Did you omit Seattle from the list, Mr. Little?

Mr. Ransom: I object to that.

The Master: If Mr. Little has overlooked one I am going to let Mr. O'Brien call it to his attention.

A. Yes, I have omitted that; I went through it hurriedly.

The Master: What is the name of the company?

The Witness: Seattle Lighting Company, Seattle.

The Master: That company makes gas by the coke oven process?

The Witness: Yes.

Q. Will you now tell us the number of ovens that are owned by these different companies that produce coke oven gas which you have enumerated?

Mr. Ransom: I object to that.

37157 The Master: I think it is material. I don't know how useful it is, but I think it is proper re-direct, if Mr. O'Brien presses it.

Mr. Ransom: I didn't go into the question at all.

The Master: Why, yes, you did.

Mr. O'Brien: The whole range of that subject was gone over yesterday afternoon, your Honor.

The Master: If you think you ought to have it I will let you have it. Here we have a thousand gas companies throughout the United States of which four or five make by-products coke

37158 oven gas, and included in those four or five there isn't one of the big cities of the country. What is the use?

Mr. O'Brien: You have excluded the big cities where the gas companies buy coke oven gas.

The Master: Yes, but I am talking about gas companies that make coke oven gas.

Mr. O'Brien: Well, you know how affiliations go with corporations, and how that matter is taken care of.

The Master: You can prove it if you can.

Mr. Chambers: Do you know the population of Seattle?

The Master: I should guess four hundred or five hundred thousand, probably less than that.

Mr. Chambers: It is about half a million now.

The Master: Well, I am a fairly good guesser on that.

Mr. Clark: New York should not be the last city to take up an improvement in the art.

The Witness: Your Honor, can I correct a slight mistake? 37160

The Master: Yes, correct anything.

Mr. O'Brien: Don't be afraid of the Master, Mr. Little; you have got counsel here.

The Witness: You referred to a number of companies—

The Master: Is that the only reason why he need not be afraid of me?

The Witness: There are other companies outside of those shown in Brown's Directory of which I know of my own personal knowledge.

The Master: Give them.

The Witness: I was asked to give Brown's Directory. 37161

The Master: Give them.

The Witness: The Peoples Gas Light Company of Chicago, now building.

Q. To what extent are they going into that, Mr. Little?

Mr. Ransom: I object to that.

The Master: Wait a minute, let us get what other companies there are that he knows of.

The Witness: Flint, Michigan.

The Master: Anything else?

The Witness: A small one at Jackson, Michigan.

37162

The Master: Any others?

The Witness: That is all I can think of now. Answering Mr. O'Brien's question, the St. Louis Coke & Chemical Company has 80 ovens under construction.

The Master: I thought you said the Laclede Company operated in St. Louis.

The Witness: This is the St. Louis Coke & Chemical Company of Granite City. They are just across the river.

The Western United Gas & Electric Company—it does not give it here. I was trying to re-

37163 member how many there were. My best recollection is they have about 20 ovens there.

North Shore Gas Company, Waukegan has 13.

The company at Indianapolis, the Citizens Gas Company, has 100 ovens.

The Central Indiana Gas Company, Muncie, has 22.

The Indiana Coke & Gas Company of Terra Haute has 60.

The Laclede Gas Light Company of St. Louis has 56.

The Philadelphia Surburban Gas & Electric

37164 Company has 40.

The Master: That is the Chester Company, is it?

The Witness: Yes, sir, Chester, Pennsylvania. Your Honor, I apparently omitted the Providence Gas Company.

The Master: Put it in now.

The Witness: It has 40 ovens.

The Master: It is enumerated in Brown's Directory as producing coke oven gas?

The Witness: Yes, sir.

The Master: With 40 ovens?

37165

The Witness: 40 ovens, yes, sir. The Chattanooga Coke & Gas Company, 24 ovens.

Seattle Lighting Company 20 ovens.

The Master: Flint, Michigan, how many?

The Witness: My recollection is 12.

The Master: And Jackson, Michigan, how many?

The Witness: About the same number.

The Master: And the Peoples Gas Light Company of Chicago are putting up how many?

Mr. Ransom: I object to that. I do not believe the witness will state that the Peoples Gas Company of Chicago are putting up an oven.

37166

The Master: He said they were.

Mr. O'Brien: Do you want to testify, Mr. Ransom. Make your objection.

Mr. Ransom: I don't want Mr. Little to be put in the position of saying something that he does not mean.

The Master: He said they were. Did you say that the Peoples Gas Light Company of Chicago was putting up some coke ovens?

The Witness: Including in that control the company that is putting it in.

The Master: What do you mean by that?

The Witness: That the company has made a contract with the Koppers Company—

37167

The Master: No, we won't take Chicago.

Mr. O'Brien: Wait until he finishes; let him finish.

Mr. Ransom: The Peoples Gas Company does not control the Koppers Company?

The Witness: No, sir.

Mr. Chambers: He didn't say that.

The Master: He did say that. The stenographer will read it.

Mr. Chambers: You misconstrued what he was trying to tell you.

The Master: Mr. Ransom asked the witness whether he meant by that that the Peoples Gas Light Company controlled the contract, is that correct?

The Witness: Yes, sir.

Mr. Chambers: Mr. Little was going to tell you that the Peoples Gas Light Company controls a company which has made a contract with the Koppers Company. That is what he was going to state.

37169

Mr. O'Brien: I understand that Mr. Little had not finished that sentence. He had reached the Koppers Company, and you closed it up.

Mr. Chambers: He didn't intend to say that the Peoples Company owned Koppers Company.

Q. What are the facts in connection with the matter?

Mr. Ransom: I object to that as immaterial.

The Master: Objection sustained. You may ask the witness whether the Peoples Gas Company of Chicago is making any gas by the coke oven process.

Mr. Chambers: Or, I submit, if the Court please, does the Peoples Gas Company own a corporation which is making a contract to put up a coke oven plant.

37170

The Master: No, I am not going to let him do that.

Mr. Chambers: The same as the one down in the southern part of Illinois.

The Master: If you gentlemen won't ask him I will ask him myself, anticipating that counsel will again object to my making the record clear.

Does the Peoples Gas Company of Chicago make any gas by the coke oven process?

The Witness: Not now.

The Master: Is that company building any coke oven plants?

The Witness: I can hardly answer that yes or no, your Honor.

Q. Answer it in your own way.

The Master: Has the Peoples Gas Light Company of Chicago, either directly or indirectly, through any other company, made a contract with the Koppers Company under which it will pur- 37172
chase coke oven gas from the Koppers Co.?

The Witness: No, sir, that is not the way.

The Master: What is the way?

The Witness: The Peoples Gas Light Company have entered into a contract with the Koppers Company whereby a third company has been formed in which both of them are interested, and the company so formed will build, has started to build on land owned by the gas company, on foundations owned by the gas company, a certain number of ovens to produce—I think the first unit is 5,000,000 feet of gas per day, and the contract is so drawn— 37173

The Master: Don't tell us how the contract is drawn, because we have to have the contract here. Your understanding of it is that the Koppers Company and the Peoples Gas Light Company of Chicago entered into an arrangement whereby another company was formed?

The Witness: Yes, sir.

The Master: Which is putting up a plant to make coke oven gas which it will sell to the Peoples Gas Light Company.

The Witness: Yes, must sell to the People's Gas Light Company.

The Master: That is your understanding of that arrangement?

The Witness: Yes, sir.

Mr. O'Brien: Controlled both by the gas company and the Koppers Company.

Mr. Chambers: I beg the Master's pardon to the extent that I thought he was going to say that this other company was owned exclusively by the People's Company.

37175 Mr. Ransom: The People's Company are not putting up the money.

Q. How many millions does this project represent, Mr. Little?

Mr. Ransom: I object to that unless it refers to the investment of the People's Gas Light Company.

The Master: The objection will be sustained unless the witness will state how much money the People's Gas Company are investing in it.

Q. Will you answer the question as last put?

A. It cannot be answered how much they are putting into it, your Honor. So far I believe they are

37176 not putting in anything directly.

The Master: What do you mean by not putting in anything directly? They are supplying the space on which the factory is to be built?

The Witness: They are providing the ground.

The Master: That is all.

The Witness: And the foundations?

The Master: And that is all?

The Witness: And certain guarantees.

The Master: That they will buy a certain amount of gas?

The Witness: No, as to the securities of the other company. Both of the companies that went into the formation of the third company have had to put up securities and collateral to secure the security of the bond issues of the third company, and the People's Gas Light Company by the contract is to gradually take over the ownership of the property within fifteen years, as I understand.

Mr. Chambers: Would it be out of the way if I asked him to state the name of the third company?

The Master: Yes, he can give that. 37178

The Witness: I don't know the exact name.

By the Master:

Q. When did this work start?

A. The work on the land and foundations started about four years ago.

Q. How far has it progressed?

A. They have got all the foundations in.

Q. In four years?

A. They had to stop.

Q. Why?

A. They did not have the money.

Q. Who did not?

A. The People's Gas Light Company did not have 37179 the money.

Q. So the operation has stopped?

A. It was stopped and has now started.

Q. Who is putting up the money now?

A. The third company has issued bonds under guarantee by the People's Gas Light & Coke Company and the Koppers Company. I understand the Mellens are back of it.

Q. Who?

A. The Mellens, of Pittsburgh.

Q. Back of what?

A. They are issuing the bonds.

Q. They are going to take the bonds?

A. Yes, sir.

Q. They have underwritten them?

A. That is what I am told.

Q. In other words, there has been a new system of financing this thing out there?

A. So I understand.

The Master: Have you any other questions to ask of Mr. Little?

Mr. O'Brien: I have many questions.

37181 The Master: Suppose you ask them.

Mr. O'Brien: I haven't had a chance with your piling of questions in on him.

The Master: But you are getting into an argument now instead of asking questions. Go ahead.

Mr. O'Brien: I want to renew my objections to your Honor taking over the cross-examination of this witness.

The Master: Go ahead. That won't get you anywhere.

Mr. O'Brien: It won't get me anywhere, I appreciate that, your Honor.

37182 The Master: I am going to take any witness out of the hands of counsel any time I please and get a fact that I want to get. You are not in the State Court now.

Mr. O'Brien: All I can do under the circumstances is to make my record.

The Master: You are in the Federal Court, Mr. O'Brien, and the Federal Court is not so keen about forms as some of the State Courts are. The Federal Court is keen to get the facts.

Mr. Chambers: I supposed the State Courts were, too.

The Master: But the State Courts are entirely too technical in their procedure.

Q. I hand you page 581 of Brown's Directory and ask you to read the statement there as to Massachusetts gas companies.

Mr. Ransom: I object to that is incompetent and having no bearing on the case.

The Master: Objection sustained.

Q. Does page 581 of Brown's Directory show the Boston Consolidated Gas Company and the New England Fuel & Transportation Company to be owned by the Massachusetts Gas Companies? 37184

Mr. Ransom: I object to that as incompetent, immaterial and having no bearing on the issues of the case. It relates to a company that is in no way under the control of any Commission's jurisdiction, it is not a public utility.

The Master: I will allow it.

Mr. Chambers: Exception.

A. Yes.

Q. I now call your attention to page—

The Master: You can say, based upon Brown's Directory, can you state whether all the stock or practically all the stock of the Boston Consolidated and the New England Company is owned by this other company? 37185

The Witness: Yes, that is what I was endeavoring to say.

Q. Will you turn to Brown's Directory covering the chapters on by-products coke ovens, and state whether or not the New England Fuel & Transportation Company makes by-products coke oven gas and if so, the number of ovens?

Mr. Ransom: I object to that as incompetent. It does not relate to the type of ovens referred to in this case, and is no part of this case.

37186 Archibald S. B. Little, Re direct.

The Master: Objection overruled.

Mr. Ransom: Exception.

A. It does, and the number of ovens if 400.

Q. What is the daily capacity of these ovens?

Mr. Ransom: I object to that as immaterial.

The Master: Objection overruled.

A. Ten million cubic feet.

Q. And the annual sales of gas not used in coking are what?

A. 2,845,050,000.

Q. Do the Schlessinger interests own any gas com-
37187 panies in Wisconsin?

Mr. Ransom: I object to that as immaterial.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Are there any companies making gas oven gas in Milwaukee or any part of Wisconsin which have control over gas companies in that state?

Mr. Ransom: I object to that as immaterial and incompetent. How has that any bearing? Because some person named Schlessinger owns stock in gas companies—

The Master: That is not the question. The question is whether coke oven gas companies own
37188 or operate. I suppose illuminating or gas plants supplying gas for illuminating and heating purposes. I will allow it.

Mr. Ransom: Exception.

A. As I understand the question, coke oven companies making illuminating gas and furnishing it to other gas companies.

The Master: No, the question is whether you know of any coke oven company which controls a gas company.

Mr. Ransom: I object to that. It has no bearing upon the issues in this case. If a company

which is engaged in the coke business in connection with metallurgy or otherwise, as a means of disposing of its excess gas, acquires an interest in a gas company, it has nothing to do with the issues in this case.

The Master: Oh, I think we are going pretty far afield. I will sustain the objection.

Mr. O'Brien: Why, your Honor, all I want is the situation, if it is verified, where interests running the one kind of plant are selling gas and making gas.

The Master: No, I will sustain the objection. 37190

Mr. O'Brien: It goes directly to this, and if there is anything speculative about it you can rule it out.

The Master: No, objection sustained.

Mr. O'Brien: As I understand it in the beginning this morning, you were inclined to take testimony where there were subsidiaries of the same parent company, or interlocking companies making on the one side coke oven gas, and on the other side making and selling gas.

The Master: I think we are getting too far afield. I would not be surprised to learn that a lot of coke oven plants own stock in various gas companies. That would not surprise me at all. I don't think that helps us any. 37191

Q. Mr. Little, will you look at page 449 of Brown's Directory and state whether or not the Detroit City Gas Company makes coke oven gas?

Mr. Ransom: I object to that. It appears on the face of it that they do not.

The Master: Well, the witness is asked whether the book shows that it does. If he says it does not he will so state. If he says that the book

37192 Archibald S. B. Little, Re-direct.

shows that it does, and it does not, I should not have much faith in Mr. Little's testimony.

A. I would have to look at another page to be sure of it.

Q. Read the inscription in the book?

Mr. Ransom: I object to that.

The Master: No, he won't.

Q. Show it to the Master then. We might as well waste no time on it.

The Master: Look at any other portions of the book and state whether anything in Brown's Directory justifies the statement by you that that book says that the Detroit City Gas Company makes part of its gas by a coke oven process.

37193

The Witness: The reason I asked your Honor to do that, there may be some change since I was there. The book states that the Detroit City Gas Company of Detroit: "(Operates Coal, Lowe, and Coke Ovens. See report in Artificial Gas Department) 215 Semet, Solvay ovens operated by Semet-Solvay Company, Syracuse, New York."

The Master: What has that got to do with it?

37194

The Witness: I don't know, your Honor. I am just reading from the book.

Q. Turn to the artificial gas companies.

The Master: I suppose that refers to the Semet-Solvay Company.

The Witness: It does not say who owns them or operates them.

The Master: That simply is a reference to the Semet-Solvay Company.

The Witness: May I read it? It is only one line.

The Master: No.

The Witness: I will show it to you.

Mr. Ransom: The Semet-Solvay Company sells gas.

Mr. O'Brien: That is not what the book says.

Mr. Ransom: It does not say the Detroit Company, does it?

The Master: I will let you read it in.

Mr. Ransom: I object on the ground that it affirmatively appears that this is gas of the Semet-Solvay Company, which is not a company which the Detroit City Gas Company owns, or which owns the Detroit City Gas Company. On the 37196
contrary it appear affirmatively that the Detroit City Gas Company is owned by the American Light & Traction Company.

The Master: Well, the situation is so confused that I am going to let it be put into the record.

Mr. Ransom: The Semet-Solvay Company being a company which is engaged in a very different line of business, in which it has certain surplus gas.

Mr. O'Brien: I move that that statements be stricken from the record. It is not testimony.

The Master: What is the use of striking it out? You have read what is on that page, read 37197
the line which has reference to it on page 248.

Q. That is the chapters in this book or directory that cover artificial gas company?

A. Yes, sir.

Q. And you are now reading under the title, "Detroit City Gas Company, Detroit"?

A. Yes, sir.

Q. What does that say as to the process of manufacture?

A. "Process manufacture, coal, Lowe, and coke ovens (Solvay ovens)."

Q. Mr. Little, the Clairton, Pennsylvania Company, is that a gas company?

A. No, that is a coke oven company.

Q. Is it owned by any gas companies or is it affiliated with gas companies?

Mr. Ransom: I object to that as incompetent.

The Master: We are getting too far afield on affiliation.

37199 Q. Is it a subsidiary?

The Master: That is too far afield. I will let the witness say whether it is owned by a gas company.

Mr. Ransom: If he knows.

The Master: If he knows, yes.

The Witness: I don't know, your Honor.

Q. Is the Dominion Iron & Steel Company in Canada, owned by a gas company or does it own a gas company?

Mr. Ransom: I object to that as incompetent and immaterial, remote, no bearing on the issues of this case.

37200 The Master: Do you know of your own knowledge, without saying whether they do or they don't?

The Witness: No, sir.

The Master: Go ahead.

Q. Is there any company in Camden, New Jersey, any gas company using coke ovens?

The Master: For the manufacture of its gas?

Mr. O'Brien: Yes.

The Master: In other words, manufacturing its own gas by coke ovens, Camden, New Jersey, do you know of any?

37201

The Witness: No.

Q. Does your study of the coke oven system of making gas run back to the earlier days of your experience in the gas business?

A. Yes, sir.

Q. How far do your studies in this matter extend?

Mr. Ransom: Objected to as not proper re-direct examination.

The Master: Objection sustained upon the ground that it is not proper re-direct. I had anticipated an objection to the last question on the same ground, and would have sustained it.

37202

Mr. O'Brien: Yesterday the witness was asked repeatedly as to what studies he had made of coke ovens and what he knew about them, and where he had seen them.

The Master: It was really part of your direct. It is all part of your direct. I won't take it as re-direct.

Mr. O'Brien: Well, the witness was catechised as to this matter only to a limited degree by counsel, and he leaves the record in such state as to require and make proper the questions as to just what the full extent of those studies was.

37203

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Have you written upon the subject of coke oven systems?

Mr. Ransom: Objected to as not re-direct.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Can you say roughly how much of the coke to be produced under your plan at Astoria by the coke ovens could be used at Astoria in the manufacture of gas?

37204 Archibald S. B. Little, Re-direct.

Mr. Ransom: I object to that as not re-direct.

The Master: Objection overruled. It bears upon the quantity to be sold.

Mr. Ransom: He undertook to state that in great detail.

The Master: Well, that is all right. This may clear up something you brought out on cross.

A. About 192,000 tons.

Q. Will you state whether in your opinion in New York City, based upon your experience in these mat-
37205 ters in various cities of the country, and your study and knowledge, and your engineering investigations, whether with reasonable exploitation, advertising or canvassing a market could be produce for coke in New York City?

Mr. Ransom: I object to that as incompetent.

The Master: Objection sustained. It is entirely too problematical.

Mr. O'Brien: Exception.

Q. Will you state what methods has been adopted in various cities of the country for the selling and marketing of coke?

37206 Mr. Ransom: I object to that as immaterial and not proper re-direct examination.

The Master: I will allow that.

Mr. Ransom: Exception.

A. The principal one is the proper sizing of coke, so that it can be made suitable for different kinds of domestic and commercial uses. The second and main one is by demonstration at the company's offices. The third is by delivering coke and putting it into people's houses under a guarantee, letting the people operate it for a month, showing them how to do it, and guaranteeing to take the coke back if the people are not entirely satisfied.

Another system is to put the coke in sacks, and the breeze in separate sacks and deliver them with instructions how to properly utilize the breeze to bank the fires and maintain an even heat throughout the 24 hours with a minimum amount of firing.

The third is to put it up in paper sacks for sale to the poorer people by retail. Other systems in use are to make special prices for delivery during summer months so as to get away from the difficulties of moving in winter weather, and to provide a steady market for the coke.

Other systems naturally include advertising in the 37208
newspapers, and cooperation with the dealers so that the dealer will know that the company is not entering the field as a competitor to drive out the dealers.

Those are the principal ones.

Q. Is it a fact that the price of coke rises with the price of anthracite coal?

A. Yes, sir, and with the price of soft coal.

Q. Is there anything from an engineering standpoint, so far as the uses of the fuel is concerned, that would render the use of coke objectionable in industries such as in the many factories in Long Island City? 37209

A. It is a necessary as well as a very desirable fuel. Its place cannot be taken by anything else.

Q. Can you speak about its heat capacities as compared with anthracite coal?

A. The heat delivered per ton of coke as compared with per ton of coal, that is the useful heat delivered for use by the consumer, is considerably better where you use coke than where you use anthracite coal.

Q. Now, so far as quantities of coke are concerned produced by the coke oven system, are they any greater than the coal gas system?

37210 Archibald S. B. Little, Re-direct.

A. Yes, coke produced in the coke ovens will sell readily at a higher price than that produced in a retort system.

Mr. Ransom: I object to the answer as not responsive and move to strike it out.

The Master: It simply means that Mr. O'Brien would ask that question sooner or later. Mr. O'Brien's question was, do you get more coke

The Witness: I beg your pardon. I misunderstood it.

Q. State further now whether or not you get more
37211 coke from the coal in the coke oven process than you do in the coal gas process, or are they about the same?

A. About the same per ton of coal carbonized.

Q. Is there anything about coke that would make its transportation by water any more difficult than that of coal?

A. No. It takes up a little more space per ton, that is all.

Q. It is lighter in weight?

A. That is what that means, of course.

Mr. O'Brien: I want to ask a number of questions about the prices paid by gas companies for
37212 coke oven gas produced by other companies. I do not want to take the time up, your Honor, if you rule it out. Are they going to be ruled out?

The Master: I don't know what your question is.

Q. Will you state the prices paid, where you know, for coke oven gas—

Mr. Ransom: I object to that as speculative, no similarity of conditions.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Is there anything about coke that would render it—assuming that difficulties of transportation and delivery are overcome—is there anything about coke itself inherently that renders it less desirable for domestic use?

A. No.

Q. Is there anything about it inherently that renders it less desirable than anthracite coal or any kind of coal for any kind of industry that you know?

A. No.

Q. Is there any inherent difficulty about coke to render it unmarketable? 37214

A. No.

Q. Then if there be any difficulty because of local conditions in New York City in the marketing of the coke they are not in the coke itself, but they would be in some extraneous matters or circumstances?

Mr. Ransom: I object to that as speculative, indefinite and meaningless.

The Master: I will allow it.

Mr. Ransom: Exception.

A. No difficulties that I know of.

Q. And do you believe from what you know and have seen in your experience in other places that with a reasonable amount of advertising and exploiting 37215 and business energy, this coke could not be marketed in New York City?

Mr. Ransom: I object to that as incompetent. The witness's knowledge is far too meagre.

The Master: Well, I will take his opinion.

Mr. Ransom: Exception.

A. I think it could be sold under good business conditions, good business judgment.

Q. And management?

A. And management, yes, sir.

Q. You have in your long experience in the gas business studied out the relations between advertising and publicity and the selling of gas?

The Master: Well, I think that has been covered; you have been over that ground. I won't allow it.

Mr. O'Brien: I have not touched that, your Honor.

The Master: Yes, you have.

Mr. O'Brien: That was brought out on the cross examination. They asked the witness about
37217 the advertising of gas.

The Master: But you have covered it on your re-direct. You have asked him what they did in other sections of the country, how they marketed gas and how they exploited it. You have been all over that.

Q. Climatic conditions do not interfere with the use of coke for domestic or industrial purposes, do they?

A. They have a bearing on the sale of coke.

Q. In what way?

A. Well, in cold climates there is much greater demand.

Q. Naturally, but is there anything in climatic con-
37218 ditions between the west and the east, the Mississippi Valley and the Atlantic Seaboard, that would render the marketing of coke more difficult in the east than in the Mississippi Valley?

A. No.

The Master: Does it require any furnace changes in grates or bars or anything of that sort?

The Witness: No, sir.

The Master: In changes in furnaces at all?

The Witness: No, sir.

Q. Is it not more desirable for restaurants and bakeries and hotels and clubs and for general domestic purposes than anthracite coal?

A. About the same, possibly a little better.

Q. And assuming that the business is reasonably advertised, that the price of coke was less than or even the same as anthracite coal, would you say that in New York City it would find a ready market?

Mr. Ransom: I object to that as incompetent. The witness has not shown knowledge of our situation here.

The Master: I will allow it. 37220

Mr. Ransom: Exception.

A. Yes.

Q. Are you acquainted with the extent of the factory developments of Long Island City?

A. Somewhat, yes.

Q. Would you be able to say anything about the extent of the factory development in and about Long Island City?

A. Yes, I noted that somewhat particularly, now as compared with three or four years ago, and five and six years ago.

Q. And are you able to say how Long Island City ranks with other cities of the country in its extent of factories? 37221

A. It is much better developed as a factory center than any other place with which I am familiar.

Q. Do you know any reason for any difficulty from what you have seen of Long Island City and what you know of the coke marketing in other cities, and its use—do you know any obstacle in the way of marketing coke to the industries of Long Island City?

A. No.

Q. And would your answer be the same as to any part of New York City?

37222 Archibald S. B. Little, Re-direct.

A. It would change it somewhat, of course, on account of a somewhat different class of consumers in New York City as compared with Long Island.

Q. Would you say that if "Gas Logic," the organ used by the complainant company under the tutelage of Mr. Livingston, were effective in developing sales of gas, it would to the same extent at least develop and promote the sale of coke?

The Master: I shall permit an answer to this question, but I will not permit any more questions on this line. I think it has been exhaustively
37223 covered. You can answer this question.

A. I think there would be equal chances of selling coke and gas by the Livingston "Logic."

Q. If strike difficulties, either at the mines or on the railroads that transport coal, tie up or limit the production of coal, would it not become necessary for some one or some companies to develop the coke industry to supply the market?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: I am curious to know why your Honor rules that question out.

The Master: I am curious to find what is in
37224 your mind in asking that question. Next question.

Mr. O'Brien: It is slightly different from a similar question asked by your Honor, except that mine is general and yours was concrete.

The Master: Then mine was probably better than yours.

Mr. O'Brien: I am sure you will place a bet on yours.

The Master: Next question.

Mr. O'Brien: Can't you see, your Honor, that as we lift the veil, as per Gawtry, of the future,

37225

you face certain problems and they involve the several factors that go into the making of gas—coal, coke, oil and labor—and can't you see that the business acumen, foresight, wisdom, is always necessary with the gas company, and that if there are—

The Master: I am not going to decide that Mr. Little's wisdom and foresight is better than Mr. Addicks' and Mr. Gawtry's. You might as well understand it once and for all, I won't do it.

Mr. O'Brien: But, your Honor, you have got to take into consideration the wisdom of the 37226
combined engineering world in this matter—at least of the United States. What I am driving at is this: If there is a possibility of gas oil going to a point where its price will be prohibitive, then it is incumbent when that is foreshadowed for any gas company to take up the problem as to how they are going to meet that deficiency of the future. If the same problem exists as to coal, then it is incumbent upon them to take it up. If the price of coal is so rigid that they must get into the coke oven business method of making gas, then it follows that they ought to have done it in the past and they should do it 37227
today. Now, it also follows that if other gas companies are going into this—if gas journals, all of them, are clamoring and hammering away at the need of going into the coke oven system of making gas, then you ought to know it and it has got to affect this case.

The Master: Then ask your next question.

Mr. O'Brien: Hence I asked the witness as to the difficulties that might come out of strikes which would limit the output of coal—whether it would not be necessary to develop the market

of coke, whether the very exigencies of the situation would not call for and create a great demand for coke.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Mr. Little, do you happen to know at this time the prices put upon coke by the Fuel Administration?

A. I don't remember it now. They changed every week or two when I was selling coke.

Q. Is your memory clear enough to say just how it compared with the price of anthracite?

37229 A. It was the same.

Q. Did the Fuel Administration exercise the same control over coke as it did over coal and oil during the war and after the war?

Mr. Ransom: Objected to as incompetent.

The Master: I will allow it.

Mr. Ransom: Exception.

A. It did.

Q. And can you state in brief terms how the Fuel Administration controlled and regulated the coal and coke and oil business during the war and after the war?

Mr. Ransom: Objected to.

37230 The Master: Objection sustained. The Court will take judicial notice of public documents of that character.

Mr. O'Brien: Will your Honor take judicial notice of the generally recognized results of the country being in war?

The Master: Certainly.

Mr. O'Brien: The great demand for labor at the cantonments and at the shipyards and the ammunition plants?

The Master: Certainly.

Mr. O'Brien: And the number of men who

went abroad in the American Expeditionary Forces?

The Master: Certainly, I will.

Mr. O'Brien: And naturally, of course, you will take judicial notice of the Selective Draft Law and what it meant so far as man supply is concerned?

The Master: Of course I will.

Mr. O'Brien: I think your Honor is acquainted with my viewpoint on that.

The Master: Let us get through with this witness; we will have speeches later on. 37232

Mr. O'Brien: But I will have some few things to soak into my mind.

Q. Will you take Brown's Directory, Mr. Little, and referring to the gas companies making coke-oven gas state roughly in each instance about how much of investment the coke-oven plants represent?

Mr. Ransom: Objected to.

The Master: I will sustain the objection. The witness has already told us what coke ovens cost and he has told us how many each one of them has. That is sufficient in the record for the purpose.

While Mr. O'Brien is looking over that paper 37233
and for the purpose of saving a few minutes, my recollection is, Judge Ransom, that Mr. Little in his direct testimony stated that in his opinion extra appliances or improvements ought to be put into your plants. You asked him nothing about it on cross-examination. Was that done deliberately or was it an oversight?

Mr. Ransom: I did not think it was consequential.

The Master: Then you did not deem it of sufficient importance to cross-examine about it.

Mr. Ransom: I did not.

Mr. Chambers: While Mr. O'Brien is looking at a paper there, there is a man here from the Tax Department to complete the dead men's records. Shall I call him now?

The Master: No, we are going to finish with Mr. Little.

Q. Mr. Little, I hand you these blueprints in the Freeport case and ask you to look them over and refresh your memory as to the matters concerning which you were catechised yesterday by counsel for the complainant (handing witness).

37235 Mr. O'Brien: Your Honor, if there is a witness here, I will ask you again to let me have a few minutes to look at yesterday's record.

The Master: No.

Mr. O'Brien: Before I ask him the questions I would like to see yesterday's record, to refresh my mind on it.

The Master: No.

Mr. Ransom: Mr. Little did not recognize or admit any of the testimony that I read to him from the Freeport case.

The Master: The statement of Judge Ransom was entirely unnecessary, and Mr. O'Brien will

37236 proceed to check up what he wants and then go ahead with the direct.

Q. You were asked yesterday by counsel for the complainant as to some testimony given in a proceeding *In re* Freeport Gas Company, before the Public Utilities Commission of Illinois, Monday, September 29, 1919. Your attention was called particularly to several items of testimony. Will you state how large a company the Freeport Company was?

A. It was selling about 130,000,000 feet per annum.

Q. And they made gas by the coal gas and water gas process?

A. Yes, sir.

Q. And what was the size of the two plants?

A. I figured on two benches of 9's being run and a 7-foot water gas set—7-foot diameter set.

The Master: What do you mean you figured on it: as a plant?

The Witness: Yes, sir. They had an extra bench, but they always have one spare.

Q. How many coal gas units did they have?

A. Three, I believe—my memory is. 37238

Q. What boiler equipment did they have?

A. One boiler. Both coal gas and water gas.

Q. Did that fact have any bearing upon the question of bench fuel or boiler fuel?

A. Yes, sir.

Q. Before taking up the boiler fuel will you look at the blueprints, at the pages concerning which Judge Ransom catechised you, and also at the record in the case, and state whether or not Judge Ransom was correct in attributing to you testimony as to 340 pounds of bench fuel?

Mr. Ransom: I object to the question. I have not attributed 340 pounds to him. I object to the question. I read to the witness an excerpt from the testimony, which he said he did not recognize. I then showed him the exhibit and he then gave us his exhibit figures. 37239

Mr. O'Brien: It is on page 11470 of the mimeograph record of yesterday. "What was the bench fuel per thousand?"

The Master: Yes, that is correct, it is on page 11470, Mr. Little. You were asked the question—and that is the question on page 11469—"What was the bench fuel per thousand, referring

to Sheets 73 and 74 of your blueprints?" You said, "340 pounds of bench fuel per ton of coal carbonized."

The Witness: That is right.

The Master: And you said that would be 17 pounds per thousand.

Mr. Ransom: And then corrected it in the next to 32.

The Master: Yes, to 32 pounds per thousand, that is correct.

Mr. Ransom: Bench fuel.

37241 The Master: And said it was nearer 33. In fact, you said precisely it was 32.6 plus.

The Witness: I think that is right, your Honor.

Q. Will you explain the conditions under which that plant was operated?

A. The coal gas plant as shown on these blueprints was to operate three months in the year making gas. The bench fuel to which reference is made in the exhibit and in the testimony here was soft coal, which requires a good deal more fuel than coke. Furthermore, the coal is charged cold and consequently there is no active heat such as when coke is fired hot from the retort. Furthermore, the benches while making

37242 gas for three months would be kept under fire more months, consequently would be using coal when there was no gas being made. In addition to that the benches here are shallow and require a great deal more of bench fuel per thousand cubic feet of gas made than do benches such as they have at Astoria, which were brought into the question, as I remember. The kind of coal being used for making coal gas in Freeport was part Illinois coal, which produces a very small amount of gas per ton of coal carbonized and consequently requires more bench fuel, in addition to which it is more difficult to distill Illinois

coal than it is to distill Eastern coal such as is used at Astoria. All of these factors have a very considerable influence on the amount of bench fuel used at Freeport and elsewhere.

Q. Were you correctly reported—I will hand you the minutes (handing witness)—in the assertion that you testified there were 340 pounds of bench fuel used?

Mr. Ransom: I object to the question.

The Master: Reported where?

Mr. O'Brien: In Judge Ransom's reference to the minutes. 37244

The Master: He has already said that is correct, 340 pounds.

Mr. O'Brien: No, he has not. He has taken the figures that were given to him.

The Master: He has taken them from his own tables.

Mr. Ransom: From his own table; he did not recognize the testimony that I read to him.

The Master: I will sustain the objection.

Q. Will you read over the testimony there, Mr. Little—

The Master: No, he won't.

Q. (Continuing.)—and refresh your mind— 37245

The Master: No, he won't.

Q. (Continuing.) And answer this question.

The Master: The stenographer will please note that the testimony handed to the witness covers 104 pages, and the Master refuses to permit the witness to sit here and read it over.

Mr. Chambers: He did not mean for him to read it all.

Q. Will you run through that testimony and find the testimony as to bench fuel?

Mr. Ransom: I object to it on the ground he did not recognize his testimony.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Will you look at your testimony, if that be a correct copy of your testimony, and find the references there to bench fuel?

The Master: Objection sustained.

Mr. O'Brien: Well, your Honor, we are met here with the same situation we were in the proceedings that were referred to in the questions of the complainant's counsel in connection with the Quincy and the other proceedings, where an
37247 attempt was made to take an isolated plant without giving the whole context of the record that would clarify the statement and give the witness a chance to explain the meanings and the extent to which he testified.

The Master: The witness yesterday did not recognize or admit the testimony read to him from the Freeport record was correct. Counsel did not press that any further but directed the witness's attention to tables or Sheets 73 and 74. His examination related entirely to those sheets. I have let you bring out from the witness his explanation of the figures given on those
37248 sheets, and I will let you ask the witness for any other explanation that he desires to give as modifying the statements therein contained.

Q. Will you proceed to give any further explanations of the testimony or the figures that you used as to bench fuel in the Freeport case?

The Master: Other than you have already given, Mr. Little?

The Witness: Yes, sir.

The Master: Do not repeat it again.

The Witness: Again?

The Master: I thought you had explained the reason for the figure 340 pounds of fuel.

The Witness: I beg your pardon, your Honor. You said repeat it again and it looked as if I had stated it once and was not to repeat it again.

The Master: I accept the correction.

A. I think I have covered it fully.

Q. What kind of territory does that gas company furnish gas to?

Mr. Ransom: Objected to.

The Master: Objection sustained. It does not make a bit of difference in the manufacture of gas what the territory is.

Mr. O'Brien: Oh, it makes some difference, 37250
your Honor.

The Master: Not a bit. I will so rule now.

Mr. O'Brien: The output, the total yearly output, the daily send-out, the daily maximum send-out, the extent covered by the mile of mains—all of those things have to do with the running of this company and the running of this plant.

The Master: That will do. The witness has said he has given you an explanation of every item or factor which bears upon the figures he gave in the Freeport case.

The Witness: On bench fuel.

The Master: On bench fuel, yes. On boiler 37251
fuel is there any explanation you want to make about your figures?

Mr. O'Brien: Wait a minute. Allow me to conduct the examination in my own way.

The Master: Yes, but I am going to cut it short very quick.

Q. Mr. Little, will you state what kind of fuel was used, or the differences between the bench fuel at Freeport, Illinois, and at Astoria?

Mr. Ransom: Objected to.

The Master: Objection sustained, as already

covered. The witness has given us that; he has told us all about the Illinois coal that they used, as compared with the Astoria coal.

Q. And the Astoria bench fuel as contemplated in your testimony is of what kind?

Mr. Ransom: Objected to.

The Master: Objection sustained as fully covered.

Mr. O'Brien: Exception.

Q. What was your figure as to Astoria for bench fuel?

37253 The Master: Objection sustained; it is in the record.

Mr. O'Brien: Well, I would like to have this placed in the record here now, where you will have it all together. Of course you have got it.

The Master: I do not want it now. Next question.

Q. What was Mr. Woods' figure for bench fuel, Mr. Little?

The Master: Objection sustained. The record shows what Mr. Woods' figure is.

Mr. O'Brien: Is your Honor aware of these figures now? Have you got them in mind?

37254 The Master: I think so.

Mr. O'Brien: I will state for your information—

The Master: You need not state.

Mr. O'Brien: Have you got them in mind?

The Master: I think I know.

Mr. O'Brien: There was an attempt made yesterday throughout the cross-examination to have the witness as paring down to the marrow the costs necessary to turn out a certain amount of gas at Astoria, and I want to call your Honor's

attention to the fact that as to bench fuel the witness had placed the figure of 260 as against Woods' 207.

The Master: Proceed.

Q. Will you now refer to the figures in the blueprints before you, furnished by Judge Ransom in connection with the Freeport case—

The Master: Those are your blueprints, are they not, Mr. Little?

The Witness: They represent my work, your Honor.

The Master: Yes, they are not papers prepared 37256
by Judge Ransom, are they?

Mr. O'Brien: "Presented" by Judge Ransom, I said.

The Master: I do not want the record confused, that is all.

Mr. O'Brien: "Furnished" by Judge Ransom. Put whatever word your Honor wants, because whatever takes place in this case, I certainly do not want to have a reputation in this case for doing anything that is sleight of hand or tricky.

The Master: I did not suggest it was anything that was tricky.

Mr. O'Brien: I want to be above anything like 37257
trickiness.

The Master: But I want the record to show that the tables to which you refer are the witness's tables.

Mr. O'Brien: The witness has stated that. I want to bring out the fact that these tables have been presented here by Judge Ransom.

The Master: They have been produced by Judge Ransom.

Mr. O'Brien: I have my own idea of what is in the record, but there is no attempt to say that

the papers are not what they are or that Mr. Ransom handed over something that was not Mr. Little's figures.

The Master: Go ahead with your question.

Mr. O'Brien: When I get through with this case I want my colleagues and my adversaries to feel that whatever defects there may be in my mind and in my method, I won't resort to trickiness.

The Master: My only hope is that this case will be finished before very long.

37259 Mr. O'Brien: There is no saving of time if this case is going to be an abortive litigation in the United States Supreme Court, your Honor.

The Master: Not if you insist on making speeches when they are not called for.

Q. The boiler house coal, I will put that briefly and call your attention to the figures that were referred to yesterday in the blueprint before you, and ask you to explain your testimony as to boiler house coal—whether the figure was yours, whether it is correctly stated, and what were the conditions under which that figure was adopted by you at that particular proceeding?

37260 A. First of all, the boiler fuel here would be higher than in other places, where they were operating coal gas benches only three months in the year and keeping them under fire a longer time, and, furthermore, I would like to state that this table presented by Judge Ransom is a computation made by me in the Freeport case showing my estimate of the cost of gas for the future, and in the matter of boiler fuel I undoubtedly made a mistake.

By the Master:

Q. In what respect?

A. I have put the boiler fuel far too high.

Q. What did you put it at then?

A. The figures were in the record yesterday. I think it was 34 pounds, was it not?

Q. What do you say now it ought to be; how much of a mistake did you make?

A. I think it was 3.4 pounds, your Honor, for coal gas.

Q. Is there any other explanation you want to make? If so, let us have it all. Look it over; where does that computation appear? The figure you say represents 3.4 and not 34, and that is Item 7?

A. Item 7—computed from Item 7. 37262

Q. From Item 7, boiler fuel, coal and breeze?

A. Yes, sir.

Q. You give a total used of 1,242,000 pounds?

A. Yes, sir, to be used.

Q. Do you question that that is a correct statement of quantity?

A. Yes, sir, that was my estimate in the Freeport case.

Q. You say that that is a correct estimate of the quantity?

A. No, I believe that is wrong, your Honor.

Mr. O'Brien: No, he said that is what he made.

The Witness: I made it, all right. 37263

Q. You think that is wrong?

A. Yes, sir.

Q. As to the quantity to be used?

A. Yes, sir.

Q. In pounds?

A. In pounds, yes, sir.

Q. For how many thousand cubic feet?

A. 34 1/2 thousand thousands; in other words, 34 1/2 million feet.

Q. In other words, you want the record to show that when you prepared a table and figured out that 34 1/3 thousand thousands or 34 1/2 million feet would require 1,242,000 pounds, you made a mistake in that figure?

A. Yes, sir.

Q. To the extent that .34 would bear to 34?

A. Yes, sir.

The Master: Any other explanation you want to make?

By Mr. O'Brien:

37265 Q. What kind of boiler house coal do they use there, Mr. Little?

A. They use Illinois coal and coke breeze, which has considerably less heat units than the anthracite coal used by the Astoria operations.

Q. And the boiler house fuel used by the Astoria Company is what?

A. I have not that figure in mind now.

Q. No, but I mean the kind.

A. Anthracite fuel and some breeze. In reference to the boiler fuel on water gas—I think was embraced in the same question—the same thing applies: Cheap Illinois coal was used and some breeze, and, furthermore, the Freeport Company has no waste heat boilers

37266 such as are in use at Astoria. It works its water gas plant only during a limited part of the day, because it does not need it to operate continuously as in the Astoria operations. That means the boiler has to be kept running 24 hours a day, even if the water gas machine is run only 12, because you cannot let a boiler down in the afternoon and start it up next morning, every day.

Q. Will you explain your testimony in that case, and your figure there, as shown by the blueprint before you, as to generator fuel?

A. The generator fuel used and contemplated in the exhibit, as shown on the exhibit, was also cheap Illinois coal. It is a new departure that was put in at my recommendation. Coal used in that fashion, as compared with coke, calls for a greater quantity of fuel to the extent shown in my Freeport exhibit; but at the same time it reduced the amount of oil that has to be used. Furthermore, in the Freeport operations the B. T. U. required was 565 and the amount of gas oil in my recollection was three gallons; and, inasmuch as you get from 70 to 80 feet of gas from each gallon of oil, in addition to the gas that you get 37268
from the coke, it follows that if you did not have the oil you must provide the gas with the solid fuel instead of the liquid fuel.

Q. There is an economic advantage in using bituminous coal?

A. In that locality there was a most decided, an enormous advantage discovered and found by the use of bituminous coal for generator fuel—there and in other places in Illinois. It calls for more fuel, more pounds of fuel, but the cost of the fuel is about cut in half.

Q. It is cut in half?

A. About that, yes. 37269

Q. Is that due to the proximity to the bituminous coal fields?

A. Yes. The freight rate is fairly low, although it does not mean Illinois coal; any kind of Illinois coal can be used. They have a long haul on the soft coal.

Q. Is there any reason why bituminous could not be used by the Astoria Company or the complainant as a generator fuel and money saved?

A. I have not gone into that question sufficiently to be able to answer.

Q. You gave other testimony in regard to generator fuel at or about the same time as your testimony in Freeport?

A. I did.

Q. At what place or in what proceedings?

A. The Peoples Gas Light & Coke Company, the Peoples Power Company of Moline, the Rockford Gas Light Company, the North Shore Gas Company, the Public Service Company of Northern Illinois, the Illinois Northern Utilities Company, and others.

Q. And what figures did you use in the Moline case?

37271 Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. O'Brien: Hasn't this matter been opened up by bringing in this Freeport situation, your Honor?

The Master: No, sir.

Mr. O'Brien: I respectfully submit it has. Here an attempt was made to make the witness appear inconsistent in his testimony as to these several items of expense or quantities, and would it not be perfectly proper to show here the witness's consistency with his other testimony.

The Master: I do not think so; not in that

37272 way.

Mr. O'Brien: Does your Honor sustain the objection because you think it unimportant?

The Master: No, I think it is improper.

Q. How old is the principle of the chamber oven method of making gas?

Mr. Ransom: Objected to as not re-direct.

A. 16 years.

Q. Is the method in use to any extent?

Mr. Ransom: Objected to as fully covered.

The Master: We have been all over that. Objection sustained.

Mr O'Brien: Exception.

Q. In what case has it been used?

Mr Ransom: Objected to.

The Master: Objection sustained.

Mr O'Brien: Exception.

Q. Will you refer to Brown's Directory and give us the dimensions of the chamber ovens that you referred to yesterday in your testimony?

Mr. Ransom: Objected to as incompetent. He gave the dimensions and kind of chamber ovens that he knew as far as he knew them.

Mr. O'Brien: No, you asked him this very 37274
question.

Mr. Ransom: That is, I tried to get the dimensions; but he did not even know the dimensions.

Mr. O'Brien: You asked him that question.

The Master: I will sustain the objection. I do not think it is useful to spend the time on it.

Q. Referring to Brown's Directory, will you tell us as per that book what the extent of the chamber ovens is at Clairton and Gary and Pittsburgh?

Mr. Ransom: Objected to as incompetent.

The Master: I will make the same ruling. I do not think it is useful enough to call for the time necessary to get it. 37275

Mr. O'Brien: Exception.

Q. If you can, will you state what the amount of the investment is, as per Brown's Directory, in those chamber ovens?

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. I will ask you the dimensions and the amount of the investment and the extent of the chamber oven plant at Joliet?

The Master: Same ruling.

Mr. O'Brien: Exception. These were matters, your Honor, that the witness was catechised about in the cross-examination.

The Master: I know it.

Q. Mr. Little, will you take your figures for the quantity of coal to be used in the chamber oven system and calculate what the yearly amount would be?

The Master: What bearing has that on the cross?

Mr. O'Brien: Oh, there was reference made to it of millions of tons of coal, by Judge Ransom, and I think you used it yourself—a million
37277 tons of coal. I want to bring out that it was not anything near that.

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

Mr. Ransom: Exception.

A. 675,980 net tons.

Mr. Ransom: That is on a twenty million production of gas?

The Witness: Yes, sir.

Q. Does your plan of increasing the total send-out of the plant at Astoria contemplate in any way the retention or maintenance of use or operation of the
37278 14th Street and 42nd Street plants?

Mr. Ransom: Objected to as fully covered.

The Master: Objection sustained.

Mr. O'Brien: I would like to ask the Master the basis of the ruling.

The Master: The witness's statement.

Q. Have you visited the 14th Street and 42nd Street plants?

Mr. Ransom: Objected to, not re-direct.

The Master: Objection sustained as not re-direct.

Mr. O'Brien: Why, you yourself, your Honor, and the counsel for the complainant, went into the question of reserves. You have asked the witness a lot of questions that are bearing upon this very point and you want to shut this out of my examination now.

The Master: I have ruled that question out, sir.

Mr. O'Brien: Will your Honor give me some inkling as to the basis of the ruling? Is it the form of the question?

The Master: Whether he did or did not visit 37280
the 14th Street and 42nd Street plants has nothing to do with this re-direct examination.

Mr. O'Brien: You have asked the witness a number of questions.

The Master: About the 14th Street plant?

Mr. O'Brien: About reserves; about the amount of reserves.

The Master: Well, ask him about reserves. I do not care whether he looked at the 14th and 42nd Street plants or not.

Q. Does the company under the plan contemplated in your estimates as to Astoria need in any way the 14th Street and 42nd Street plants as reserves? 37281

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. O'Brien: You both spoke together that time; I did not hear what your Honor said.

The Master: I sustain the objection made by Judge Ransom.

Mr. O'Brien: Has the stenographer noted my exception to the last two rulings of the Court?

The Master: If he has not he will do it now.

Q. Under the plan which you have shown in your testimony for the full use of the Astoria plant would

there be any necessity for retaining as a reserve supply the gas of the 14th Street and 42nd Street plants of the complainant?

Mr. Ransom: Objected to, not re-direct.

The Master: I have ruled that out twice, Mr. O'Brien.

Mr. O'Brien: Exception.

Q. Under the plan which is set up for Astoria in your testimony would the 99th Street and 21st Street plants and the Astoria plant provide what you consider to be the necessary reserve?

37283 Mr. Ransom: Objected to.

The Master: The same ruling will be made. The witness in his plan has fully set forth his views about the requirements and reserves and how he would handle it, and I am not going to go into it again now on re-direct.

Mr. O'Brien: Your Honor in regard to the re-direct examination is ruling quite literally, close to what you conceive to be the line, and yet when I pressed objection on objection to both you and the interrogator of the complainant getting into fields entirely apart from the direct-examination, my objections were overruled.

37284 The Master: Will you tell me what earthly use there is in having Mr. Little repeat what he has already spread on the record in page after page of his statement and his plan for operation, which includes his views about how the reserves are to be handled? It is all covered in his statement.

Mr. O'Brien: I do not know what is in your Honor's mind. You mean you can make deductions from the testimony already in?

The Master: Why, he has said so.

Mr. O'Brien: And in the face of that you do not need to ask any questions about 14th Street and 42nd Street?

The Master: Mr. Little has fully set forth his views as to how these plants could be run without the 14th Street and the 42nd Street plants, and the reserves that were necessary. He had that in mind as a gas engineer that there would have to be reserves. Am I not right about that, Mr. Little?

The Witness: Yes, sir.

The Master: What I am trying to do is to save 37286
time.

Mr. O'Brien: I hope your Honor won't get irritated.

The Master: No, I want to save time, and I can see it more clearly than you do.

Mr. O'Brien: I asked your Honor to give me a few minutes to go over the testimony of yesterday.

The Master: I have not stopped you. You have been reading for nearly half an hour now.

Mr. O'Brien: Half an hour, your Honor?

The Master: Yes, I have timed you. I will finish with Mr. Little before we adjourn for 37287
lunch. If it takes all day I am going to finish with Mr. Little now.

Mr. O'Brien: I note an exception to your Honor's direction in that regard. That is all I can do.

Q. Mr. Little, in regard to the figures, the estimates that you have made about chamber ovens, did you formulate any figures and go into that matter with any study prior to your interviewing the engineers or experts you referred to at Pittsburgh?

A. Yes, sir.

Q. And did the figures that you say they gave to

you confirm your judgment in regard to the costs of a chamber oven plant?

Mr. Ransom: Objected to as incompetent.

The Master: I will allow it.

Mr. Ransom: Exception.

A. They did.

Q. In the face of the rising price of gas oil would it not have been the part of sound business judgment and necessary foresight for the complainant company to have adopted in 1914, or thereabouts, a chamber oven system?

37,289 Mr. Ransom: Objected to as incompetent.

The Master: I won't take any more testimony from this witness along that line. I have taken all the testimony I am going to from the witness on those points.

Mr. O'Brien: Your Honor, we have before the Court the testimony of the witness Addicks in his report to the Up-State Commission as to the method of meeting the rising price of oil, and the chamber oven system is nothing more than a coal gas system.

The Master: I understand it. I say it is sufficiently covered.

37,290 Mr. O'Brien: And the company, at least its vice president Mr. Addicks, appreciated, as did many gas engineers, the necessity at that time of finding and promoting a method of making gas other than the carbureted water gas.

Mr. Ransom: I object to counsel continuously reading into this record a lot of matter for which there is no foundation.

Mr. O'Brien: The matter of extending their plants, either by adding more gas units or taking over an adjoining plant.

Mr. Ransom: We have had a morning of continuous testimony by Mr. O'Brien.

37291

Q. Do you recall any other places in which chamber oven systems have been installed over and above those mentioned by you yesterday?

Mr. Ransom: Objected to.

The Master: I won't take the testimony.

Mr. O'Brien: Exception.

Q. Will you refer to Brown's Directory and answer the last question?

Mr. Ransom: Objected to.

The Master: I won't permit the witness to do it.

Mr. O'Brien: Exception.

37292

Q. Has this system been approved by generally recognized gas journals?

Mr. Ransom: Objected to as incompetent.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. I call your attention to Sheet 8 of Section 7, and particularly to the last group of figures, and ask you to state which of the items from 15 to 39 inclusive, in the last column, you have adjusted to conform with the increased amount of sales as contemplated by your testimony?

Mr. Ransom: Objected to.

37293

The Master: I won't take it. It is fully covered.

Mr. O'Brien: My memory of it was, your Honor, that some of those items were covered. I do not think they all are.

The Master: I will not take the testimony.

Mr. O'Brien: Exception.

Q. Mr. Little, you have not made any appraisal of the entire plants and equipment and properties of the complainant company? A. No.

Q. You have not visited any of the plants other than those you have testified to?

A. No.

Q. You have not taken up an inventory of the distribution system and figured out any kind of an appraisal of the mains, meters, services and connections?

A. No.

Q. You have not attempted in any way to formulate or to appraise the value as of any time of the real estate, including improvements, of the complainant company?

A. No.

37285 Q. Nor to go into questions of franchises or any matters of that kind?

A. No, I have not.

Q. And you have not in mind these valuations as of any time?

Mr. Ransom: Objected to as not re-direct.

The Master: I am going to allow it again.

A. No.

The Master: None of this series of questions has been proper.

Q. When your attention was called to candle power by the Master and you were asked your opinions as to the relative merits, if I may use the term, of the

37286 candle power standard and the B. T. U. standard, where you expressed yourself about a candle power standard did you not have in mind if a change was made to a B. T. U. basis there would be a reduction in the price of the gas?

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

A. I did.

The Master: That there ought to be a reduction?

The Witness: There ought to be a reduction.

The Master: Why, of course. That was the very point of my inquiry, to bring out that the people were paying more than they ought to pay for the gas that was useful to them.

Mr. O'Brien: I mean the price that the people should pay.

The Master: Yes, that was the very point of my inquiry, Mr. O'Brien, to bring out that the people were paying more than they ought to pay for useful gas.

Mr. Ransom: And it would cost less to make it then. 37298

Q. In the reduction to a B. T. U. basis would the companies not gain more than the consumers, proportionately?

Mr. Ransom: Objected to as incompetent; it is not within any issue here.

The Master: Objection sustained.

Mr. O'Brien: It has a bearing on some publicity work of the complainant in the daily newspapers.

The Master: Objection sustained.

Mr. O'Brien: And particularly has a bearing upon the use made by the company's witness, Alton Miller in another case— 37299

The Master: Have you another question?

Mr. O'Brien: Where they are trying to reopen the Kings County Lighting Company case.

The Master: I am not trying the Kings County Lighting case.

Mr. O'Brien: But I am calling your attention to the testimony of the company's witnesses on a matter concerning which this witness was interrogated by the Master.

The Master: Are you trying to force me into a position where I will take the witness of the stand?

37,300

Mr. O'Brien: I think I will rest here, your Honor. I will ask the privilege, if there are some matters that have to be cleared up, of recalling the witness.

The Master: Have you any further cross?

Mr. Ransom: Is he through?

The Master: Have you any further cross?

Mr. Ransom: No.

The Master: Then re-direct is finished. Court is adjourned to two o'clock.

(Witness excused.)

37,301 Recess.

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Afternoon session.

Mr. Chambers: I ask that I be permitted to ask Mr. Little a few questions on re-direct. I haven't had an opportunity yet to do it, because we closed so suddenly. I was waiting for that opportunity. It would not take long.

The Master: Application denied. I am not going to take a chance.

Mr. Chambers: The record will not be complete
37,302 —I mean there are some things that ought to be explained on re-direct it seems to me.

The Master: Too late.

Mr. Chambers: Why, because of something I have done?

The Master: No, because the witness is excused. Call your next witness now.

Mr. Chambers: Exception.

37303

J. FREDERICK CALHOUN, called as a witness on behalf of the defendants, being duly sworn, testified as follows:

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Have you prepared or caused to be prepared a tabulation of tax valuations of Daniel Engelhard and William P. Plaatje and Henry Bayer, and Bryan O'Hara? A. Yes, sir.

Q. Engelhard and Bayer and O'Hara are dead?

A. Engelhard and O'Hara are dead.

The Master: And Bayer is sick?

37304

The Witness: Yes, sir.

The Master: And Plaatje has disappeared?

The Witness: Yes, sir.

Q. Now, in this table that you have prepared, are these the valuations placed upon the blocks and lots set forth on this paper by the deputy tax commissioners?

A. Yes, sir.

Q. For the years there indicated?

A. Yes, sir.

Mr. Chambers: I offer that in evidence.

The Master: All right, it will be marked.

Mr. Ransom: This is over my objection and exception?

37305

The Master: Yes.

Mr. Ransom: So far as the witness Plaatje is concerned I object to it as incompetent and improper and no foundation laid; and as to the whole I object to it as incompetent, irrelevant and immaterial, not bearing upon any issues in this case, and no probative force as to values or investment at that time, and not within the issues in this case, and not relating to a period of time covered by the issues in this case.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-391.

Mr. Ransom: With respect to this Exhibit AA-391, I notice that in respect of one of these blocks, figures are given for improvements. Is that received subject to my motion to strike it out if it appears that at that time the improvements were of a kind that your Honor has not permitted these appraisers to testify to?

37307 The Master: Yes.

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NATHANIEL SILVERMAN, recalled.

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Silverman, have you prepared a table which is called Table *20*?

A. Yes, sir.

Q. What is intended to be shown by that table?

A. Balances for general structures, general structures improvements, and improvements to real estate

37308 accounts for years 1909 to 1918, inclusive.

Q. Where did you get your information from?

A. From the company's operating ledgers.

Q. And is the table correct?

A. Yes, sir.

Mr. Chambers: I offer it in evidence.

Mr. Ransom: I object to this as incompetent, irrelevant and immaterial. It does not appear to have any relation to any issues here.

The Master: Well, 1918 would have, wouldn't it?

Mr. Ransom: Book balances, whatever is meant by that.

The Master: Well, I understand this is intended to show your accounts?

Mr. Ransom: Well, is it intended to show all of the balances in those accounts?

The Master: It is intended to show what it does show. I will receive it and give you a chance to cross-examine and find out what it is.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-392. 37310

Q. Did you prepare another table called for convenience Table 270?

A. Yes, sir.

Q. Net book increase for certain properties, 1909 to 1918?

A. Yes, sir.

Q. Where did you get your information from for that table?

A. From the company's records.

Q. Is it correct?

A. Yes, sir.

The Master: Show a copy to the other side.

Q. What does it show generally? 37311

A. It shows net book increases for certain properties, 1909 to 1918, and the properties are listed in this particular Table No. 270.

Mr. Chambers: I now offer it in evidence.

Mr. Ransom: I object to this statement. On its face it is fragmentary and incomplete as compared with the last exhibit. It relates to properties that are not within the scope of this case, including properties that are not claimed to be used in the company's business, property as to which no dispute arises in this case.

The Master: I will receive this. I am taking all this so that Mr. Chambers can develop his point on the return prior to 1918.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-393.

Mr. Ransom: This series of tables relates to another fragmentary portion of years.

The Master: That is all right.

Q. Have you prepared another table designated as Table 271?

37313 A. Yes, sir.

Q. What is the title of that?

A. Book cost of certain office buildings, 1909 to 1918.

Q. To December 31st, 1918?

A. Yes, sir. It shows the total amount accumulated by years to December 31st, of each year, 1909 to 1918 inclusive.

Q. Where did you get your information from to compile that table?

A. From the company's records.

Q. And is the table correct?

A. Yes, sir.

37314 Mr. Chambers: I offer the table in evidence.

Mr. Ransom: I think he should give some indication at the present time of what records he claims he took this from.

The Master: Oh, we won't waste time just now.

Mr. Chambers: I don't mind asking him.

Mr. Ransom: It helps a great deal in checking up to find what he got this from. To say that he got it from the company's records is not very clear. Certainly the complainant was never permitted any such method of lack of proof.

Mr. Chambers: Well, I don't mind. What books did you get it from?

The Witness: The source is shown by Table No. 270.

By the Master:

Q. Where did you get the data, what books did you use?

A. The company's operating ledgers, and the three accounts, general structures, general structures improvements, and improvements to real estate.

Q. In the operating ledgers?

A. Yes, sir. 37316

The Master: The same objection, I suppose to this?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants Exhibit AA-394.

By Mr. Chambers:

Q. I show you another table marked for convenience Table 272, and ask you if you prepared that table?

A. Yes, sir.

Q. What does it show?

A. Book balances as shown by Table 269, less certain properties shown by Table 270. 37317

Q. What data did you use?

The Master: He said Tables 269 and 270.

Q. Is the table correct?

A. Yes, sir.

Mr. Chambers: I offer that table in evidence.

The Master: Same objection?

Mr. Ransom: Yes, and on the ground that it is building up a fanciful and hypothetical and theoretical combination of reams of tables for

which there is no foundation in the record and no foundation in fact.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-305.

Mr. Chambers: Your witness.

The Master: Will you have any more tables now for Mr. Silverman?

Mr. Chambers: Two more.

The Master: When will they be ready?

37319 Mr. Chambers: They may be ready tomorrow morning. They are being typewritten.

The Master: If you can't get them here this afternoon I am going to suspend the cross-examination of these tables until we are all through with the tables.

Mr. Ransom: We will send them right down for checking.

The Master: Withdraw your witness until you get your other tables.

Mr. Clark: I would like to make an application to recall Mr. Little for re-direct examination.

37320 The Master: Your application is denied.

Mr. Clark: Exception.

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BENJAMIN COHEN, recalled.

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Cohen, I hand you Exhibit AA-209, Station Cost, 44th Street station, and ask you if you have a change to make in the figures as of the years 1909 and 1911, in that table?

A. In 1909 the coke in generators should be $49,210.76 instead of $49,201.76.

Handling coke should be $3,496.20 instead of $3,505.20.

For 1911, the coke under boilers should be $6,351.19 as against $6,112.31.

Handling boiler coke should be $713.46 in place of $952.34.

The unit price for the coke under boilers should be .148 in place of .143.

The cost per thousand cubic feet made for the same item should be .239. 37322

For handling boiler coke the cost per thousand cubic feet made should be .027 in place of .036.

Q. Is that all?

A. That is all I have to offer now.

Mr. Ransom: Is that all the corrections?

The Witness: That is all the corrections.

Q. I hand you a table marked "Schedule No. 26-A, Consolidated Gas Company of New York, Station Costs, Labor and Materials used in Gas Production, 14th Street station, 1906 to 1918," and ask you whether that was prepared by you?

A. This table was prepared by me or under my direction. 37323

Mr. Ransom: He ought to state which.

The Witness: Well, it is both. I may have done part of the years myself, and other years perhaps other people did, and I probably checked it.

Q. You had assistance in preparing this?

A. I did.

Q. What data did you base this table on, Mr. Cohen?

A. Data I got from the operating ledger, the operating journal, gas production statistics, and the record of manufacture.

37324 Benjamin Cohen, Direct.

Q. In the years 1906 to 1907 you have set up the cost of making oil gas at 21st Street as part of the cost of the gas at 14th Street?

A. I have set up the cost of making gas at 21st Street for 14th Street, yes, sir, for 1906 and 1907.

Q. Where did you get the set-up of this, that is, the manner in which you have set out the different kinds of expenses, labor, material, etc.—where did you get that from?

A. The form for this statement was copied as closely as I could follow it from a book which I think they
37325 called the monthly report, or the yearly report, a big black book.

Mr. Ransom: Monthly report is the correct name.

The Witness: I don't know the name of it.

The Master: In other words, by this exhibit you have tried to show variances in the figures appearing in that black book?

The Witness: No, I followed the company's own form of setting up the costs at the various stations.

The Master: Does your figure agree with the company's figures?

37326 The Witness: I have not checked it up against the final reports, for the simple reason that they haven't any such report until the year 1917, I was told.

Q. Is that table accurate.

A. As accurate as can be compiled from records which do not always agree. That is, the company's production statistics record, the record of manufacture, the ledgers and journals do not agree throughout for the entire period; that is, they do not agree all the time. There are several discrepancies there which appear from time to time.

The Master: Have you noted them?

The Witness: I have noted a few, I didn't note them all.

Q. Did you follow?

A. I followed the company's figures whether they were right or wrong.

The Master: The figures where?

The Witness: In the operating ledger; I took the ledger as the basis.

Mr. Clark: I offer that in evidence.

The Master: Show a copy to the other side.

Mr. Ransom: I object to this on the grounds 37328
previously noted.

The Master: On general grounds?

Mr. Ransom: On the grounds which relate to the pertinency of inquiries of this sort as to years that are not within the scope of this case.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper marked Defendants' Exhibit AA-396.

Q. Mr. Cohen, I show you a schedule marked "Schedule No. 26-B, Consolidated Gas Company of New York, Station Cost, Labor and Material Used in Gas Production, 42nd Street Station, 1906 to 1918," and ask you whether that was prepared in a 37329
similar manner by you or under your direction, or whether it was similarly checked as accurate in accordance with the books of the company, as you have stated in regard to the other exhibits?

A. That is correct.

Mr. Clark: I offer that in evidence.

The Master: Show it to the other side. I take it that counsel for the complainant interposes the same objection?

Mr. Ransom: Same objection.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-397.

Q. Mr. Cohen, I show you a similar schedule, "Schedule 26-C, Consolidated Gas Company of New York, Station Costs, Labor and Material Used in Gas Production, 21st Street station, 1906 to 1918," and ask you whether that was similarly prepared as the last one?

A. That is correct.

The Master: That is the water gas plant at

37331 21st Street, is it?

The Witness: Yes, sir.

Q. It was similarly checked?

A. It was similarly checked.

Q. And conforms with the figures in the company's ledgers, as you stated?

A. Yes, sir.

Mr. Clark: I offer it in evidence.

Mr. Ransom: I make the same objection as before.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked De-

37332 fendants' Exhibit AA-398.

The Master: You stop in 1918 on all these exhibits?

The Witness: Yes. 1918.

Q. I show you a similar schedule, 26-D, as 99th Street, 1906 to 1918, and ask you whether that was prepared in the same manner as the former schedules?

A. That is right.

Q. And checked in the same manner?

A. That is correct.

Mr. Clark: I offer that in evidence.

Mr. Ransom: I make the same objection.

The Master: The same ruling.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-399.

Q. Mr. Cohen, the figures on the gas production statistics, are they in your opinion the basis for the journal entries and later the ledger entries in regard to the matters set forth in those exhibits?

Mr Ransom: I object to that as incompetent.

The Master: I shall sustain the objection. I do not think this is a matter for opinion evi- 37334
dence.

Mr. Clark: He is an accountant and examined these books.

The Master: I won't take his opinion. He can state what he finds as a fact, and from which he draws the inference.

Mr. Clark: You cannot find as a fact that a figure is copied.

The Master: There is some basis for Mr. Cohen's opinion. I will let you bring out the fact upon which he bases his opinion, but I won't let you ask him for his opinion.

Q. Do the gas production statistics agree in gen- 37335
eral with the entries in the journal and ledger?

A. They do in a general way.

Q. Do they in all cases?

Mr. Ransom: I object to that as incompetent. That is not the method of proving whether they do or not.

The Master: I will allow that.

Mr. Chambers: If there is any disparity let him direct attention to it.

The Master: I expect he will.

Mr. Ransom: If he answers this question then it simply takes up a lot of time proving the contrary.

The Master: No, he has got to prove the fact.

Mr. Ransom: Let him show that.

The Master: I will allow this question.

Mr. Ransom: Exception.

The Master: Were there some discrepancies?

The Witness: There were.

Q. Will you point them out on the books of the company?

37337 A. In 1910—

Mr. Ransom: I object to the answer. The witness has not the books before him. The books are the evidence.

Mr. Clark: They have been called for, are they here?

The Master: Objection overruled.

Mr. Ransom: Exception.

A. At 42nd Street, in 1910, in the month of August the operating ledger shows a price adjustment of $1,497.65 on coal tar, and the apparent sale of $877.03, total $2,374.68, which do not appear on the gas production statistics.

37338 Mr. Ransom: This is all over my exception?

The Master: Yes.

A. (Continued.) Similarly on ammoniacal liquor—

Mr. Clark: I would as soon have him point it out on the books.

The Master: No, I would rather take it this way.

A. (Continued.) At 42nd Street, ammoniacal liquor shows $863.69 price adjustment, and the apparent sale of $1,062.18, total $1,925.87, which does not appear on the gas production statistics.

In 1910, at the 14th Street station, on the operating ledger has $880.82 for coal tar. The gas production statistics say $894.81, a difference of $13.99.

In 1910, at the 14th Street station, on ammoniacal liquor, the operating ledger has $1,465.83. The gas production statistics has $1,286.98, a difference of $178.85.

In 1911, the gas production statistics has 37,067.52 tons of coke. The record of manufacture has 37,073. The difference is in the month of June, where the record of manufacture shows 2,896 tons as against 2,890.52 on the gas production statistics.

37340

Mr. Ransom: That was coal used or received?

The Witness: Used.

Q. Go ahead.

A. In 1909 the gas production statistics show 61,334,500 pounds of coke produced. The record of manufacture shows 61,354,000, a difference of 19,500 pounds, which amount is made up by differences during the months of January, February and March.

At the 21st Street station, in 1909, the coal tar used in March, according to the operating ledger was $4,473.87. The gas production statistics show no money value for the tar used whatever.

Mr. Ransom: Coal tar at 21st Street?

37341

The Witness: Oil tar, or water gas tar. Oil tar is what it should be. It is sometimes called water gas tar.

I will have to refer to the journal for 1916. I made a notation here but I could not copy the journal complete.

Journal entry No. 1058 of 1916 shows for 99th Street as follows:

"Debit drip oil, 99th Street station, to residual and by-product revenue, $2,117.20, for the estimated value of drip oil produced for sale

at the 99th Street station during the month of November, 1916, as per report from the Statistical Department on file." The gas production statistics show no quantity produced during that month.

In March, 1915, the gas production statistics show 35,570 gallons of drip oil as apparently used. On reference to the journal and ledger I found that it was not used but was sold.

Mr. Vilas: Was that at 99th Street, Mr. Cohen?

37343 The Witness: Yes, sir, 99th Street. At 42nd Street, in 1909, month of November, the gas production statistics has no money value for tar sold. The operating ledger has $712.30. In 1910, at 14th Street, the gas production statistics, which sometimes show the journal entry on the face of them, in that year shows a journal entry as follows:

"Debit duplicate gas charges" for $2,473.05, and "Credit residual by-product revenue" $4,991.92.

That entry in posting to the ledger was reversed, that is, the former amount being posted

37344 to the latter account and vice versa. This resulted in a misstatement of the value of the coke sold by $2,518.87.

At the 14th Street station for 1918 the gas production statistics show residuals received instead of showing residuals produced. I would have to see the statistics to state which of the residuals are so shown.

In 1915 there is a journal entry, No. 586, adjusting the drip oil account, adjusting the credit to production from drip oil for 42nd Street, which is wrong in that it takes out of an account called, "Sale of Residauls and By-Products," an

item which has never gone into the account either that year or any other year prior to that up to 1906. Those are all that I noted.

Q. Are these gas production statistics kept in ink or in pencil?

A. As a rule they are kept in pencil.

Q. The record of manufacture, in what form is that kept?

A. The record of manufacture with the exception of the adjustment on account of water, or some other small adjustments that they make apparently after they close the book for the year, are kept in ink. 37346

Q. Does that agree generallly with the gas production statistics?

The Master: He has answered that. He said generally they agree.

The Witness: They don't always agree.

Q. Would you say from an examination of the books and records of the company that if the books of account, the journals and ledgers were destroyed, the same books with the same entries could be made up from the existing gas production statistics and record of manufacture?

Mr. Ransom: I object to that as incompetent.

The Master: Objection sustained. 37347

Mr. Clark: The same testimony was brought out the other day by the complainant.

The Master: Objection sustained.

Mr. Clark: Exception.

Mr. Clark: That is all for Mr. Cohen.

The Master: Cross-examination suspended.

Mr. Ransom: Is this all the tables that this witness is going to put in in this case?

Mr. Clark: So far as I know it is.

The Master: Cross-examination suspended until they get a chance to look at this exhibit.

(Witness excused.)

CHARLES FRANK, recalled:

DIRECT-EXAMINATION BY MR. CLARK:

Mr. Clark: I would first like to put in evidence the following parts of pages of the annual report of the Astoria Light, Heat & Power Company:

For 1912—as to expenses, page 55.

Residuals sold, page 53.

Duplicate gas charges, page 57, line 19, and page 56.

37349 Details of residuals used and included in duplicate gas charges credit, page 66, lines 28 to 31 inclusive.

Residual expense, page 57, line 16.

For the year 1913, the same period.

For the year 1914, the same pages.

For the year 1915—

As to expenses, page 55.

Residuals sold, page 53.

Duplicate gas charges, page 57, line 19, and page 56.

Detail of same charges also on page 69, lines 26, 29, 30, 31 and 32.

37350 Residual expense, page 57, line 15.

For the year 1916, page 55.

For the year 1917, page 55.

1918, page 55.

For the Central Union Gas Company, annual report for the year 1912, as follows:

As to expense, page 55.

Residuals sold, page 53.

Duplicate gas charges, page 57, line 19, and page 56, line 44-D.

Details of residuals used included in duplicate gas charges, page 66, lines 28 to 31 inclusive.

Residuals expense, page 57, line 16.
For the year 1913, the same pages.
For the year 1914, the same pages.
For the year 1915, the same pages.
For the year 1916—
As to expenses, page 55.
Residuals produced, page 55.
For the year 1917, the same.
For the year 1918, the same.

Mr. Ransom: With respect to putting in some of the fragmentary portions of the Central Union reports, that I take it is on the same basis. 37352

The Master: You can put in any other portion that affects it.

Mr. Ransom: Those reports are considered as received?

The Master: Whatever part of it is material on the part that is already offered, is received.

Q. Mr. Frank, I show you a schedule entitled, "Central Union Gas Company, Production Expenses for Coal and Water Gas," and ask you whether that was prepared by you or under your direction?

A. Yes.

Q. Will you state what sources it came from?

A. The annual reports of the Central Union Gas Company on file with the Public Service Commission. The unit cost shown at the bottom of the page in cents per thousand cubic feet made are derived. 37353

Q. Those are all derived figures?

A. Yes, sir.

Q. The figures on the first line, that is the first part of the tabulation for gas coal, does that appear on the report in that figure, or is it a total?

A. You refer to coal gas manufacture?

Q. Yes.

37354 Charles Frank, Direct.

A. Gas coal includes the caking coal and the coal under the retort.

Q. The figures on the line in the same tabulation, "Other Supplies and Expenses," what does that include?

A. Generally, I should say, water, purification supplies, gas storage and other supplies and expenses.

Q. Miscellaneous works expense?

A. And miscellaneous works expense.

Q. Now, the line entitled, "Repairs at Works," what does that include?

37355 The Master: You can lead the witness. I assume you have a memorandum there before you.

Q. Does that include all of the repair account, lines 17 to 27 in the report?

A. Yes, it includes all the repairs at the works, including the holders and the works tools.

Q. Your line, "Residuals Produced," includes residuals sold, residuals produced and used in production, those two accounts?

A. Yes, less the residual expense.

Q. What have you done with the water gas tar in the Central Union Company?

A. Water gas tar is a residual of water gas manu-
37356 facture. It is included there as a residual of water gas manufacture.

Q. And drip oil as well?

A. Drip oil I have divided between the coal and the water gas.

Q. And saturated oil?

Mr. Ransom: This seems to be a very fanciful combination of the uniform system of accounts—

The Master: You can bring that out on cross-examination when you get to it.

A. I have taken the residuals of coal gas and residuals of water gas. Some of them are absolutely known to be coal gas. Drip oil I divided.

Mr. Ransom: The witness has no possible qualifications, I submit.

Mr. Clark: He doesn't say that he has any qualifications, he is stating what he did.

Mr. Ransom: How does he know how it should be divided.

Mr. Clark: He doesn't state that he knows, he states that he divided it.

The Master: Go on, let us get the tables in 37358
and we will straighten it out afterwards.

Q. In your details of water gas manufacture your line "Other Supplies and Expenses" includes the same items that were included under the same title in coal gas manufacture, is that correct?

A. Yes, sir.

Q. The repairs likewise include all of the repairs at the works?

A. Yes, sir.

Q. Various items appear on that page?

A. Yes, sir. The repair item includes all the items of repairs reported by the company as production repairs on page 55. 37359

Q. Have you checked this statement with the reports and is it accurate?

A. I have checked it with the reports and it is accurate.

Mr. Clark: I offer it in evidence.

Mr. Ransom: I object to its receipt on the ground that it is an artificial and unsound combination of accounts comprised in the company's reports. It embraces a division of items which the witness is not qualified to divide. It is made up on hypothetical bases, operating 350 days in

a year, which from an engineering point of view, according to the testimony in this case, exceeds the utmost calculations that anyone has indicated.

Mr. Clark: There is no hypothesis in this at all.

Mr. Ransom: The obvious purpose of it is to produce an artificial and unsound derived figure in cents per thousand cubic feet made.

The Master: Objection overruled.

Mr. Ransom: Exception.

37361 Paper received in evidence and marked Defendants' Exhibit AA-400.

Q. I show you a table, a blueprinted table of the Astoria Light, Heat & Power Company, "Detailed Cost of Production, Coal and Water Gas, 1912 to 1918," and ask you whether that was prepared by you or under your direction?

A. Yes.

Q. Was it taken from the annual reports of the Astoria Light, Heat & Power Company to the Public Service Commission?

A. Yes.

Q. Are the combinations as to gas coal and other
37362 supplies and expenses, and repairs at works, the same on this table as in the table of the Central Union?

A. Yes.

Q. And the figures in cents per thousand cubic feet are derived?

A. They are derived from the figures at the top of the sheet.

Q. As to residuals on this sheet, did you make any different distribution than you did in the case of the Central Union?

A. I credited the drip oil in one or two years when it appears, to the water gas plant.

Q. All to water gas?

A. All to water gas.

Q. Have you checked this table with the reports?

A. I have.

Q. And it is accurate?

A. It is.

Mr. Clark: I offer it in evidence.

Mr. Ransom: I make the same objection.

The Master: It will be received over the same objection and exception.

Paper received in evidence and marked Defendants' Exhibit AA-401. 37364

The Master: What is Note C on that table?

The Witness (reading): "No increase in equipment. The company states the increase is based upon the actual results of the operation of the plant."

Mr. Ransom: What is the word that has been erased there?

The Witness: I don't remember.

Q. I show you schedule marked Schedule No. 3, "Revenue of Space in General Office Building, 1914 to 1918," and ask you whether that was prepared under your direction?

A. Yes. 37365

Q. Will you state the sources of the figures that appear on that schedule?

A. A statement given to me by Mr. Davidson which is headed, I believe, "Analysis of Rent Revenues." This statement I checked with the operating ledger and the sundry debtors' blotter, and then prepared this statement.

Q. Have you checked this statement?

A. I have.

Q. Is it accurate?

A. Yes.

Mr. Clark: I offer it in evidence.

The Master: It will be received over the same objection and exception.

Mr. Ransom: And on the further ground that this obviously relates to tenants other than the complainant, and portions of the building which are not used or claimed to be used in the gas business.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-402.

37367

Q. Mr. Frank, I show you a table, Schedule No. 34, "Operating General Office Building," and ask you whether that was prepared under your direction?

A. It was.

Q. State the basis of the figures that appear on that schedule?

A. Operating ledgers, 1914 to 1918, and operating journals for those years.

Q. Have you checked that table?

A. I have.

Q. Is it accurate?

A. It is.

37368

Mr. Clark: I offer it in evidence.

Mr. Ransom: I make the same objection.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-403.

Q. I show you Schedule No. 28, "Consolidated Gas Company of New York. Analysis of Gas Transferred, from Gas Exchanged Record and Vouchers, 1906 to 1918," and ask you whether that was prepared under your direction?

A. It was.

Q. From what did you derive the figures that appear on this statement?

A. From a series of envelopes which are marked "Gas Exchanged."

Q. Where did you get those envelopes?

A. That was not the only basis. Also from the vouchers and from the operating ledgers.

Q. Where did these envelopes come from, from whom did you get them?

A. To the best of my recollection I should say around Christmas Day, the day before or the day after. 37370

The Master: Where did you get them from?

The Witness: From Mr. Davidson.

Q. Had you asked for some underlying data of this gas transferred prior to that time?

A. Oh, yes, I had asked for it away back last August or September.

Q. And what were you informed?

A. Mr. Davidson told me that the vouchers which he gave me were the only record of gas transferred in the company's accounting department.

Q. Did the vouchers contain all the information that you wanted?

A. They did not. 37371

Q. Did those envelopes which we finally produced for you contain information which was not on the vouchers and which was desired?

A. They generally did, yes.

The Master: You finally got what you wanted, did you?

The Witness: Yes.

The Master: Then don't let us waste time. He got what he wanted.

Mr. Clark: It took him four or five months.

37372 Charles Frank, Direct.

The Master: I don't care if it took him four or five years. Don't let us waste another five months establishing the fact that he finally got what he wanted.

Q. The column on this analysis of gas transferred which is entitled "Basic Charge," that represents the amount of money figured on the basis which is set forth concisely in Note A—is that correct?

A. Yes.

Q. The average in the next column is derived from the figures?

37373 A. It is the thousand cubic feet divided into the basic charge.

Q. And the 10 per cent added is an actual charge where set up—is that correct?

A. Yes, sir.

Q. And the final column "Average" is derived by division?

A. Derived by dividing the thousand cubic feet into the total charge.

Mr. Clark: I offer that table in evidence.

The Master: I want to announce at this point that I will receive no more tables after Monday from any defendant in this case.

37374 Mr. Clark: That is closing us out.

Mr. Chambers: Why is that?

The Master: I have got to draw a line somewhere. I am going to draw it on Monday. Any tables that are to be produced in this case have got to be introduced in evidence on Monday. Otherwise we will never get through with this case.

Mr. Clark: I don't think the Master is justified in saying that. He hasn't found out what condition we are in at all.

37375

The Master: I have had the statement made to me over two weeks ago that the tables would be completed within a day or two, and then another day or two, and there seems to be no end to it. I am going to end it.

Mr. Ransom: Aside from the errors in these statements, of course they are simply our own figures.

Mr. Chambers: Let us go slow. By doing that you stop us putting in our evidence.

The Master: That is what I am going to do.

Mr. Chambers: Close us out on Monday.

37376

The Master: Any tables that you haven't got in on Monday will stay out of this case.

Mr. Ransom: Is this last document offered?

Mr. Clark: It has been offered.

Mr. Ransom: I object to it on the ground that it is made up on a hypothetical basis, not in conformity with the actuality. This idea of a basic charge, as he calls it, represents purely an arbitrary segregation, fragmentary, no aid or help, and no bearing on any issue in this case.

The Master: Objection overruled.

Mr. Ransom: Exception.

Paper received in evidence and marked Defendants' Exhibit AA-404.

37377

Mr. Chambers: I want to protest as vigorously as I can against the ruling that the Master has announced that on a certain day, without knowing what tables we have, or what tables are in preparation, that he is going on that particular day to prohibit us from putting in any more tables, and I take an exception.

The Master: The Master repeats what he has already stated, that in the last week in Jan[illegible] the statement was made to him by various counsel that they would have all their tables ready

37378

within a day or two, have them all in. I adjourned the court on the 31st day of January, or on the 30th day of January and did not reconvene until the 9th of February. Next Monday will be the 10th of February. They have therefore had over two weeks since I adjourned court in January to finish these tables. I find that unless I limit the time within which matters should be done they are never completed, and I find it necessary to limit the time. If counsel will make any representation that they will have them on Tuesday instead of Monday, I will modify my

37379 ruling accordingly, but I am going to draw a line now beyond which exhibits of this kind will not go in.

Mr. Clark: I take an exception to the ruling.

Mr. Chambers: I do not like to take issue with you, but I respectfully do take issue with you that so far as I am concerned I never made any such representation, nor do I believe you will find it in the record.

The Master: The statement was made to me, whether on or off the record.

Mr. Chambers: I never said I would get my tables in by a certain day.

37380 The Master: You will have to get in all the tables you intend to get in very, very quickly.

Mr. Chambers: Monday we might not have them all in, it might be Tuesday. We are sitting from 9:30 until 6 o'clock.

The Master: I am going to fix a limit of time I have now fixed it on Monday. If any representation is made to me on Monday that they will be in on Tuesday, I will change it, but I am going to get this out of the way.

Mr. Chambers: It may be physically impossible to have all the witnesses on the stand that have tables.

37381

The Master: That is different.

Mr Chambers: That is what I have in mind. We are going on from 9:30 to 6 every day.

The Master: You have got to call your witnesses one after the other and get in all your tables now.

Mr. Clark: I have only two other tables that Mr. Frank is to put in.

The Master: Where are they?

Mr. Clark: They have just come up from Dr. Weber, and we haven't been able to get copies. I presume it would be better to wait until we get the blueprints made.

37382

The Master: Do you think you can get copies today or in the morning?

Mr. Clark: They were sent to the blueprinters but they have not been furnished.

Mr. Ransom: Make your offer now and give them to us as soon as you can.

The Master: Put them in now and get that out of the way and give Judge Ransom copies as soon as you get them. Will that complete Mr. Frank, then?

Mr. Clark: That completes Mr. Frank. I would prefer to wait a few minutes until I can talk to him about this.

37383

The Master: All right, call another witness, somebody.

Mr. Clark: I have a lot of vouchers I have called for that I understand are here, that I want to put in evidence.

The Master: All right, go ahead with that. Meantime we will suspend with Mr. Frank.

Mr. Clark: I offer in evidence Voucher No. 08—

The Master: How many vouchers are you going to offer in evidence?

37384

Mr. Clark: Quite a lot of them.

The Master: Suppose you make up a list of them and offer them as one batch of vouchers.

Mr. Clark: How can I make a list? I want the vouchers themselves put in evidence.

Mr. Ransom: Here is a letter of five or six pages—

The Master: Are they all enumerated in that letter?

Mr. Clark: Yes.

The Master: Offer the vouchers that are enumerated in that letter as one exhibit. You don't

37385 suppose I am going to sit here two weeks marking those exhibits?

Mr. Clark: Of course we can use them, I suppose, if they are marked in this way?

Mr. Ransom: I am willing to put the letter in the record and have it considered that the vouchers therein referred to are offered.

The Master: Are offered as one exhibit?

Mr. Ransom: Yes.

The Master: That is just what I want to do. You don't have to offer each separate voucher.

Mr. Ransom: I will consent that this letter be received in evidence, and that you offer the

37386 vouchers listed therein.

Mr. Chambers: And that they are received in evidence?

Mr. Ransom: I have not consented to that yet.

The Master: Major Clark now offers in evidence the various vouchers enumerated upon the letter addressed to William L. Ransom, Esq., 120 Broadway, New York City, dated February 10, 1920, signed by William Hayward, J. H. C., Special counsel. You object to the receipt of these vouchers in evidence?

Mr. Ransom: No, I don't.

37387

Mr. Chambers: We might note that they are here physically.

The Master: All of the bundle of vouchers produced by Judge Ransom which are stated to be the vouchers enumerated in the letter just described is received in evidence as one exhibit. For the purpose of the record the letter itself will be marked as the exhibit.

Letter received in evidence and marked Defendants' Exhibit AA-405.

The Master: You say that these vouchers bear upon certain journal entries?

37388

Mr. Clark: Besides these vouchers there are items in the ledgers that have no vouchers supporting them.

Mr. Ransom: At the end of this letter there is called for the 1915 and 1916 operating journals and operating ledgers they are here.

Mr. Clark: This is 1918 that I am speaking of.

The Master: It is in evidence. What do you want to do now? Do you want to point out something in it?

Mr. Clark: I want to read in certain journal entries.

37389

The Master: You don't have to stop to do that now. The whole book is in evidence.

Mr. Clark: I can make up a list of them.

The Master: The book is in evidence.

Mr. Clark: I can take anything out of it?

The Master: Yes, certainly.

Mr. Chambers: I ask to substitute Defendants' Exhibits AA-209, AA-210, AA-211 and AA-212 with photostatic copies of the original

The Master: The photostatic copies will be considered as the exhibits.

CHARLES FRANK, recalled.

DIRECT EXAMINATION BY MR. CLARK:

Q. I show you a table entitled "Statement Showing Distribution by Years of Profit and Loss Adjustments Affecting Production," that is the title of the first page; second page, "Statement Showing Distribution by Years to Profit and Loss Adjustment Affecting Operating Expenses," and ask you whether they were prepared by you, or under your direction?

A. They were.

37391 Q. Will you state what formed the basis of those tables?

A. The profit and loss account in the general ledgers together with the vouchers, journal entries and other data.

Q. Does the first page of this table as to production expenses tie up with Exhibit AA-131, to show the adjustments in production expenses, as shown on that exhibit?

A. They do.

Q. And the second page, does that tie up with Defendants' Exhibit AA-129, details of accounts included in operating expenses?

37392 A. It does.

The Master: I take it that whatever objection you interposed to Defendants' Exhibit AA-131, you now interpose to this Schedule No. 35 A, which is offered, and which it is said ties up with it?

Mr. Ransom: Yes; also on the further ground that it includes intentionally years that do not relate to the issues in this case, and likewise omits years that are fundamental in this case.

The Master: Objection overruled. This paper will be marked as Exhibit AA-131 1 2.

Now, you offer the statement showing distribution by years with profit and loss adjustments affecting operating expenses?

Mr. Clark: Yes.

The Master: And you make the same objection to that?

Mr. Ransom: I make the same objection.

The Master: Same ruling. This will be marked Defendants' Exhibit AA-129 1/2.

Mr. Ransom: On the further ground as to the last one, that it covers a number of items which have nothing to do with the gas business 37394
of the complainant.

The Master: Objection overruled. Now, is there anything else from Mr. Frank?

Mr. Clark: That is all I have.

The Master: Did you say you had something for Mr. Frank, Mr. Chambers?

Mr. Chambers: Yes.

By Mr. Chambers:

Q. Will you take the journal of 1907, Consolidated Gas Company, and bring that over here, and turn to folio 273.

A. Yes, sir.

The Master: What book is this? 37395

The Witness: Operating journal, Consolidated Gas Company, for 1907.

Q. On page 273 do you find an entry marked 278 on the margin?

A. 748.

Q. 748, and styled, depreciation?

A. Debit depreciation.

Q. Will you please read that entry?

A. Debit depreciation $155,195.63, credit plant account 63rd Street station $155,195.63. The explanation reads, "For the original cost of sundry plant

and apparatus which was located at Avenue A, First Avenue, 62nd and 63rd Streets, dismantled during the years 1905-6-7. The land on which said plant and apparatus was located was sold to the Standard Gas Light Company in 1905. Apparatus has been dismantled and sold for scrap."

Mr. Ransom: Is that all of it?

The Master: Read the whole entry.

The Witness (reading): "The original schedule of November, 1884, shows the book value of plant and apparatus demolished at the aforesaid location, viz, two gas holder tanks of 94 feet diameter and 26 feet net depth, built of brick with concrete bottom, at $40,000 each, $80,000.

37397

Two telescope gas holders 92 feet 6 inches diameter of outside section, 91 feet diameter of inner section, 28 feet height of each lift. Holders have cast iron columns 24 inches inlet and 20 inch outlet pipe, capacity each 325,000 cubic feet, $56,000, forward, $136,000." Then on page 274, valve house built—

The Master: Well, that is a continuation of the entry?

The Witness: Yes. (Reading): "Value

37398

house built between the two holders, brick cellar, frame upper part, slate roof, house is octagon, 17 feet long, 15 feet wide, $2,000; it contains three 30 inch branches, two 30 inch valves with hand wheels, two 24 inch valves, two 20 inch valves, $1,500, total $139,500. Erected since consolidation, brick valve and boiler house built in 1880 and 1890, $11,449.50, $4,246.10, extended, $15,695.63, total, $155,195.53.

Q. Now, will you take the 1910 journal, Consolidated Gas Company, folio 394?

A. This is a journal entry on page 394, December, 1910, debit tearing down two holders—West 18th Street—$113,467. To holders, $113,467 credit. The explanation reads, "For the book value of tanks and holders No. 9 and No. 10 at 18th Street station dismantled and sold as scrap during 1910, as per detailed statement on file. The following entry on the same page reads, "Depreciation, debit $113,097.04, tearing down two holders, West 18th Street, credit, $113,097.04. The explanation reads, "For the net loss to the company from dismantling of holders Nos. 9 and 10 at 18th Street station, during 1910, made up as follows: Book value of tanks and holders, $113,467, cost of dismantling and clearing away, $2,294.14, total, $115,761.14, less value of material recovered, $2,664.10, net loss $113,097.04. 37400

Q. Now, your 1911 journal, at folio 409?

A. Depreciation debit, $50,285.32, and to general suspense, $50,285.32. For the net loss to the company by reason of the dismantling at the 11th Street station of the old retort house and contents, together with buildings shown below: 37401

| | |
|---|---|
| Old retort house N | $17,500. |
| Cost of dismantling | 2,311.67 |
| Total | 19,811.67 |
| Benches | 23,441.86 |
| Cost of dismantling | 2,350.95 |
| Making | 25,801.81 |
| Less sale of scrap | 1,802.14 |
| Total extended | 23,999.67 |
| Cast-iron condenser H | 3,850. |
| Less sale of scrap | 301.61 |
| Total extended | 3,548.39 |
| Frame carpenter shop O | 470. |
| Cost of dismantling | 75. |

| | | |
|---|---|---|
| Extended | | 545. |
| Temporary stables | | 750. |
| Cost of dismantling | | 100. |
| Total | | 850. |
| Shed M | | 1,500. |
| Cost of dismantling | | 30.50 |
| Total | | 1,530.50 |
| Total | | 850,285.32 |

Q. Now, the 1914 journal, folio 493?

37403 A. Journal entry on page 493, December, 1914.

| | | |
|---|---|---|
| "Renewal and Contingency | | |
| Suspense Debit | $879,028.20 | |
| General Suspense | | $879,028.20 |

The explanation reads

"For the net loss incurred as the result of dismantling and removing of certain portions of the West 18th Street plant during the year, as per the reports from the Assistant Engineer of Construction on file. Book value

37404 of plant dismantled 880,074.92

| | | |
|---|---|---|
| Cost of dismantling and removing | 11,718.45 | |
| Total | 891,793.37 | |
| Total of | | 891,793.37 |
| Less salvage recovered | | 12,765.17 |
| Net loss to the Company | | 879,028.20 |

Q. In the 1917 Journal, Consolidated Gas Company, folio 11?

A. (Reading.)

"Renewal and Contingency
Suspense Debit $151,885.48
To fixed capital December 31,
1908,
Plant West 18th Street,
Credit $151,885.48

The explanation reads, "For the original cost of plant withdrawn from service located on the block between 17th and 18th Streets, from 10th Avenue to Marginal Street, on the Plot 125 feet deep on Tenth Avenue from 18th to 19th Streets, which was sold January 4, 1917, to the New York Realty & Terminal 37406
Company,

| | |
|---|---|
| Office Building | $22,000.00 |
| Condenser House | 11,132.00 |
| Purifyer House | 59,589.00 |
| Boiler and Engine House | 18,330.00 |
| Shop Building | 13,659.00 |
| Coke Yard Wall | 874.90 |
| Weigher House | 1,112.53 |
| Engine Room Extension | 2,409.52 |
| New Fences | 1,750.00 |
| Retort House Wall, remaining as fence | 2,500.00 |
| Tank Yard Wall | 6,300.00 |
| Paving, Sewers, Etc. | 12,138.53 |
| Total | $151,885.48 |

37407

Q. Now, 1908 Operating Journal page 268?

A. December, 1908.

Mr. Ransom: What entry?

The Witness: There are no numbers to the Journal entries at this time. (Reading.)

37408 Charles Frank, Direct.

| | | |
|---|---|---|
| "Renewal and Contingency Debit | $209,955.87 | |
| To tank and holder 21st Street station credit | | $127,957.96 |
| Foundations 21st Street station credit | | 44,858.53 |
| Damages 21st Street station | | 37,139.38 |

Explanation: Charging off the balance heretofore shown in the latter accounts to the former account."

Q. Page 273?

37409 A. On page 273 of the same Journal there is a copy of a resolution dated January 19, 1909, with a heading, "Memorandum of Amounts to be Charged to Renewal and Contingency Account as of December 31, 1908." There appears here a more detailed statement of the entry on page 268 which I have just read. It reads, "21st Street station costs of the foundation, tank and holder located at Avenue A and 20th Street which collapsed and was entirely destroyed, together with the costs of damages which accrued by reason of said collapse, said costs being made up as follows:

| | |
|---|---|
| Foundations | $ 44,858.53 |
| 37410 Tank and Holder | 127,957.96 |
| Damages | 37,139.38 |
| Total | 209,955.87 |

Q. Now, the Consolidated Journals of 1907?

A. This is Journal No. 8 of Consolidated Gas Company.

Q. For 1907?

A. No, it is 1899. This is the Consolidated Gas Company's Journal No. 8 of 1899, page 276, January, 1899, the entry reads:

Real Estate Lawrence Point, Long Island, account, debit $450,000.00
Debtor to National City Bank Special Account $450,000.00

The explanation reads "Purchased about 265 acres including Berrian Island."

The next entry reads:

Sundry debtor to real estate Lawrence Point Long Island account credit $750,000.00
National City Bank 37412
Special account debit $450,000.00
Astoria Light, Heat & Power Company balance account debit 300,000.00

The explanation reads, "The above specified real estate transferred through John W. Crimmins; to the Astoria Light, Heat & Power Company, the bonds of the Astoria Light Heat & Power Company are first mortgage 5 per cent gold bonds running fifty years from February 1, 1899, interest payable February 1st, and August 1st in each year, $375,000 at 80 per cent.

Q. The next entry on the journal reads?

A. Astoria Light, Heat & Power Company, stock 37413
account, $500,000 debit, debtor to the National City Bank special account, $500,000; credit purchased 5,000 shares of $100 each of the Astoria Light, Heat & Power Company for cash at par.

Q. Journal No. 9, page 69, that is the journal for 1899, entries in December, 1899, are they not, on page 69?

A. Yes, sir. This is Journal No. 9 of Consolidated Gas Company, December 31, 1899, at page 69, "Real Estate, Lawrence, Long Island account debit $300,000, to profit and loss account, credit, $300,000 for balance [illegible]"

Mr. Chambers: That is all.

The Master: All right, Mr. Frank.

(Cross-examination suspended.)

Mr. Clark: When will you want Mr. Kraft again?

The Master: Oh, probably Monday.

Mr. Ransom: Does that finish with Mr. Frank?

The Master: I understand there are no more.

Mr. Clark: There is just one more summary that we will put in Monday, a summary of tables already put in.

37415 Mr. Ransom: Could you let us have them tomorrow?

Mr. Clark: I could let you have a copy of it now, I haven't checked it up yet, though.

The Master: Well, you had better give the copy to Judge Ransom and he can have it checked up and cross-examined as soon as you put it in.

Mr. Clark: All right.

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FRANCIS MYLOTT, recalled:

DIRECT-EXAMINATION BY MR. CHAMBERS:

37416 Q. Mr. Mylott, have you prepared a table which for convenience is marked Table 285?

A. Yes, sir.

Q. What is the title?

A. The title is book cost of materials and supplies 1905 to 1918, as of December 31st.

Q. Where did you get your information from?

A. The information was obtained from the operating ledgers of the Consolidated Gas Company from the years 1905 to 1917, inclusive, and the operating Ledger A for the year 1918.

Q. And is the table correct?

A. It is.

Mr. Chambers: I offer the table in evidence, two copies furnished the other side by Mr. Maltbie.

Mr. Ransom: Same objection.

The Master: Same general ruling.

Mr. Ransom: Exception.

Table marked Defendants' Exhibit AA-406.

Mr. Chambers: That is all.

The Master: The cross-examination will be suspended until they have a chance to examine this. 37418

Mr. Ransom: Is this all for Mr. Mylott?

Mr. Chambers: I think so.

The Master: Now, the next witness.

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WILLARD F. HINE, recalled.

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Hine, have you prepared a table designated, for convenience, Table 300?

A. I have. 37419

Q. What does that show?

Mr. Ransom: Purport to show?

A. It is a tabulation showing contract dates and prices paid for oil by various companies in the First District, all prices in cents per gallon delivered by bulk boat, unless otherwise noted.

Q. Is it correct?

A. It is.

The Master: It is taken from what, the contracts offered in evidence?

37420 Willard F. Hine, Direct.

The Witness: From the contracts offered in evidence.

The Master: In other words, you say it is a tabulation of other evidence in the case?

The Witness: Yes.

Q. And attached to it are four sheets of explanations?

A. Yes, sir.

Mr. Chambers: I offer the paper in evidence, two copies delivered to the other side.

The Master: Same general objection.

37421 Mr. Ransom: Let us see, I may have specific objection to this.

The Master: Well, the objection that it is incompetent, irrelevant and immaterial will protect you just as fully as fourteen pages.

Mr. Ransom: Well, I also point out that it has specifically been made to stop before it approaches the period to which this case relates.

The Witness: Well then, it will be of so much less value, that is all.

Mr. Ransom: It is only brought down to 1915.

The Master: All right. It may be of very little value to me, but I will take it over the general objection, overruled and exception.

37422 Marked Defendants' Exhibit AA-407.

Q. Mr. Hine, did you prepare a table designated for convenience as Table 250?

A. I have.

Q. What does that show?

A. That shows plant account of the Consolidated Gas Company 1884 to 1905, inclusive.

Q. And where did you get the data from to make up this table?

A. That was taken from special accounts Ledgers Nos. 1, 2 and 3, and operating ledgers 1901 to 1905, inclusive.

Q. Is the table correct?

A. It is.

Mr. Chambers: I offer it in evidence.

The Master: Same objection, overruled, giving you an exception.

Mr. Ransom: I object to it as it does not appear whether the witness has prepared it personally, and if he has he is not an accountant, he is not accustomed to dealing with statistics of this sort.

The Master: I will take it as an ancient document, if for no other reason. 37424

Mr. Ransom: Likewise it stops at 1905.

The Master: That is why I said it was an ancient document.

Marked Defendants' Exhibit AA-408.

Q. Did you prepare another table, designated for convenience, Table 251?

A. I have had such a table prepared under my direction.

Q. Did you check it?

A. I have.

Q. You checked the last table that was offered in evidence, did you?

A. Yes, sir, I have checked against the balances. 37425

Q. And is this Table 251 correct?

A. It is.

Q. What does it show?

A. It shows construction account 1884 to 1888, the debits and credits and the balances at the beginning and the end of the years.

Q. Now, what happened on December 31, 1888, as per your note?

A. On December 31, 1888, the balance of $1,020,544.65 in construction account was closed out by a transfer to plant account, and thereafter all bal-

ances in construction account were closed out to plant account during the year charges were made.

Mr. Chambers: I offer the table in evidence.

The Master: Received over the same objection.

Mr. Ransom: Same objection.

The Master: Same ruling and exception.

Marked Defendants' Exhibit AA-409.

Q. Did you prepare another table designated, for convenience, Table 252?

A. I have.

Q. Was that prepared under your direction and

37427 supervision?

A. It was.

Q. Checked by you?

A. Yes, sir.

Q. And is the table correct?

A. It is.

Q. What does it show?

A. It shows the combined plant and construction accounts, 1884 to 1935, with the construction account spread into the other account during the year in which the charges were made, so it is really a combination of the two preceding tables.

Mr. Chambers: I offer the table in evidence.

37428 The Master: Received over the same objection, ruling and exception.

Marked Defendants' Exhibit AA-410.

Q. Did you prepare another table known as Table 253?

A. I had that table prepared.

Q. Checked by you?

A. Yes, sir.

Q. Is it correct?

A. It is.

Q. What does it show?

A. It shows an analysis of the debits to the plant account 1884 to 1906. This is an analysis of the debits shown on Table 252.

Q. You have a note A on the table. Will you explain what that is, or state what it is?

A. That is with reference to the debits in 1884. There was no distribution shown in journal or ledger by plants.

Q. This was all taken—this data was taken from the books of the Consolidated Gas Company?

A. Yes, sir.

Mr. Chambers: I offer the table in evidence. 37430

The Master: Received over the same objection, ruling and exception.

Marked Defendants' Exhibit AA-411.

Q. Did you prepare another table known as Table 254?

A. I had that prepared.

Q. Checked by you?

A. Yes, sir.

Q. Data taken from the books of the company?

A. Yes, sir.

Q. What does the table show, generally?

A. It shows an analysis of the credits to plant account 1884 to 1906, that is the credits as shown on 37431
Table 252.

Mr. Chambers: I offer the table in evidence.

Mr. Ransom: Same objection.

The Master: Same ruling and exception.

Marked Defendants' Exhibit AA-412.

Q. Did you prepare another table designated for convenience, Table 255?

A. I did.

Q. Or have prepared under your direction that table?

A. Yes, sir.

Q. Was it checked by you?

A. It was.

Q. Where did you get your data from?

A. That data comes from the Tables 256 to 263 inclusive.

Q. And is the table correct?

A. It is.

Q. What does it show?

A. It shows an adjusted book cost of plant as of January 1st, 1906, that is the cost as shown by the books of the Consolidated Company with certain

37433 adjustments.

Q. You give there the different stations, and then the general office. Why have you nothing there for East 132nd Street station, Inwood station, Kingsbridge station?

A. Because those were eliminated, charges against those stations were not used and useful, all except to the Kingsbridge station, there have been no charges against that.

Q. You said the table was correct?

A. Yes, sir.

Mr. Chambers: I offer it in evidence.

Mr. Ransom: I object to such a mutilated,

37434 fragmentary, hypothetical readjustment of books?

The Master: I will take it.

Mr. Ransom: There isn't the slightest evidence in the case that 132nd Street was not used and useful, there isn't any evidence that Inwood at that time was not used and useful.

The Master: I will take it as representing the defendants' claim in that respect. Overruled, exception.

Mr. Ransom: If it goes in, it looks like evidence, reams of exhibits. We object on the further ground the witness has no qualifications to

make any such adjustments or to undertake to make any such mutilation of this company's investment.

Marked Defendants' Exhibit AA-413.

The Master: Mr. Chambers, I take it that you have a series of exhibits prepared by Mr. Hine, or under his direction, which you wish to offer, and I wish you would get them all together and ask him whether he has prepared the tabulations to which you refer, and one general question will apply to all of them. I think we are wasting a lot of time. 37436

Mr. Chambers: All right.

Q. Now, you prepared a table designated as 256, and that shows adjusted book cost 14th Street station January 1st, 1916?

A. That should be 1906.

Q. Under your direction?

A. Yes, sir, I prepared it.

Q. And it is correct, is it?

A. It is.

The Master: The witness says he prepared it himself.

Q. What data did you use for 256?

A. Well, the first item on that table is from Table 253, the charges in 1888 and 1889, against the East 15th Street tank, holder and so forth; with the next item, 2 per cent, which was estimated, and the last item of charges in 1905, on account of the valve house and contents at the East 15th Street holder, the charges are shown on Table 253 and company's records in conjunction with those tables. 37437

Q. It is correct, you say?

A. It is.

Q. You prepared 257, did you not?

A. I did.

37438 Willard F. Hine, Direct.

Q. And that shows what?

A. The adjusted book cost, 18th Street plant, January 1st, 1906.

Q. And what data did you use for that?

A. The data as indicated opposite each item.

Q. Is that table correct from that data?

A. It is.

Mr. Ransom: Correct according to his opinion, I submit.

The Master: Well, all of these are correct about the defendant's theory of the case.

37439 Mr. Ransom: Well, but when a witness says that a thing is correct—

The Master: Well, in his opinion.

Mr. Ransom: He does not say it conforms to the books, he calls it adjusted or some other fanciful and hypothetical thing.

The Master: His statement is merely a conclusion.

Mr. Ransom: Estimated percentages which he assumes.

Q. Where you said "Assessed value see page 9766 of the testimony," you mean the testimony in this case?

37440 A. I do.

Q. And where you said S. D. 47, what did you mean by that?

A. Senate Document, No. 47 in evidence.

Q. Where you have used Exhibit AA-241, you mean AA-241 in this case now on trial?

A. I do.

Q. The next table you prepared was 258?

A. Yes, sir.

Q. Is that table correct?

A. It is.

Q. What data did you use for that

A. The sources indicated after each item, that is Exhibit AA-248 in conjunction with—

Q. Meaning that exhibit in this case?

A. Yes.

Q. And that shows what, that Table 258?

A. The adjusted book cost 21st Street station, January 1st, 1906.

Q. Now, Table 259, did you prepare that, or was it prepared under your direction?

A. I prepared it.

Q. And it is correct? 37442

A. It is.

Q. And when you say Exhibit 367, you mean Claimant's Exhibit 367?

A. I do.

Q. In this case?

A. In this case.

Q. And 185 the same?

A. Yes, sir.

Q. You don't mean by that that you assumed the exhibit is correct, you simply used it for the purpose of the tabulation?

Mr. Ransom: I object to that, he uses it, it speaks for itself. 37443

The Master: Objection overruled.

A. I used those figures; I did not know about their correctness.

Q. And when you used Senate Document 47, you merely took them off, not assuming they were correct, and have used them in your table?

A. Yes.

Q. Now, is this Table 259 correct, did you say?

A. Yes.

Q. Table 260, did you prepare that?

A. I did.

37444 Willard F. Hine, Direct.

Q. And when you say P. S. C. Reports, you mean the reports of the Public Service Commission of this company to that Commission?

A. Yes, and that reference to the P. S. C. Report is only to the date.

Q. And is the table correct, 260?

A. It is.

Q. What data did you use in making up that table?

A. Well, the charges are indicated on Table 253 and other data from the company's books.

Q. And Table 261, did you prepare that?

37445 A. I did.

Q. Is it correct?

A. It is.

Q. What is that, the adjusted book cost of 65th Street station, January 1st, 1906?

A. Yes.

Q. What data did you use in making up that table?

A. Well, those charges are shown on Table 253, and the credits shown on Table 254.

Q. Table 262, did you prepare that or have it prepared?

A. I prepared that.

Q. And that shows what?

37446 A. Adjusted book cost 111th Street station, January 1st, 1906.

Q. And when you say Exhibit 367, you mean Claimant's Exhibit 367?

A. I do.

Q. You don't mean because you used that, that you assumed that that table is correct, do you?

Mr. Ransom: Objected to as incompetent, improper in form.

The Master: Objection overruled.

Q. That exhibit is correct?

A. No, I just used those figures.

Q. And is this table correct using those figures, assuming those figures?

A. Yes.

Q. Did you prepare Table 263, or have it prepared under your direction?

A. I prepared it.

Q. Is it correct?

A. It is.

Q. What does that table show?

A. Adjusted book cost 44th Street station, December 31, 1914.

Q. And S. D. means the same as you have stated heretofore? 37448

A. Yes, Senate Document.

Q. Est. means estimated?

A. Yes, sir.

Q. And where you used Exhibit 185, you mean plaintiff's Exhibit in this case?

A. I do.

Q. You did not assume any of those figures in any of those exhibits or Senate Document 47 was correct, you simply used them in the tabulation?

A. Yes.

Q. And is the table correct, using those figures?

A. Yes. 37449

The Master: And your estimate of some figure?

The Witness: Yes, one figure estimated.

Q. The one that you estimated was storage house?

A. The fifth item on the page.

Q. The amount is $1,500.00 for the only one that you estimated?

A. Yes.

Q. Now, Table 265, did you prepare that?

A. I did.

Q. What does that show?

A. That shows adjusted book additions to plant 1906 to 1918.

Q. And is it correct?

A. It is.

Q. What data did you use in making it up?

A. Well, the data is indicated by the notes as to the way those are made up.

Q. And when you used Exhibit 185—

A. I mean Exhibit 185 in this case.

Q. Plaintiff's exhibit?

A. Plaintiff's exhibit.

37451 Q. And you do not mean by that that you took that as correct; but you simply used that exhibit?

A. I used that exhibit.

Q. Now, Table 266, did you make that up?

A. I had that made under my direction.

Q. And you checked it?

A. I did.

Q. Is it correct?

A. Yes, sir.

Q. What does that show?

A. It shows the adjusted book retirements of plant, 1906 to 1918.

Q. And the notes show the sources of the data used

37452 in making it up?

A. Yes.

Q. And where you used Exhibit 367, that is plaintiff's Exhibit 367?

A. Yes.

Q. And Exhibit AA-248, that is Defendants' Exhibit AA-248 in this case?

A. Yes.

Q. You do not assume that Exhibit 367 was correct, but used it for the table?

A. I did.

The Master: I suppose you took 248 as being correct?

The Witness: No, I just took them all—

Q. (Interrupting) You did not assume 248 was correct, either, did you?

A. No, except so far as this table is concerned.

Q. That is true of all of the exhibits you used, isn't it?

A. Yes, I just took the figures.

Q. Now, Table 267?

A. Yes.

Q. Did you make that table up? 37454

A. That was made under my direction.

Q. And is it correct?

A. Yes, sir.

Q. What does that show?

A. Adjusted book cost of plant 1905 to 1918, as of December 31, of each year.

Q Where did you get your data for that table from?

A. That is made up from the preceding tables.

Q. And you say it is correct?

A. Yes.

Q. Now, Table 268, did you make up Table 268, or have it made under your direction? 37455

A. I made that up.

Q. What does that show?

A. Useful improvements charged to Real Estate Account and land devoted to gas operations, balance—

The Master: What do you mean by useful?

The Witness: That would be the improvements on these properties, which we have considered were used and useful during that period.

The Master: In other words, what you believe were used and useful?

The Witness: Yes.

Q. And is it correct?

A. Yes.

Q. And you have an explanatory note at the bottom?

A. Yes. The amounts do not include improvements prior to 1884 on Hester Street property, that is Block 239, Lots 1 and 5, and 114th Street and Third Avenue office property, Block 1042, Lot 33, nor the bulkhead at West 44th Street and North River. The improvements purchased with land since 1884, e.g., west 150th Street shop also are not included in the
37457 above figures.

Q. Table 269?

A. That was one put in evidence by Mr. Silverman.

Q. 275?

A. Yes.

Q. Was that table made up under your direction?

A. Yes.

Q. And what does that show?

A. Adjustment book cost of fixed capital, 1905 to 1918 except land and certain buildings.

Q. And what data did you use in making it up?

A. The first line entitled improvements under real estate was made up from Table 268; the figures in the
37458 next line, general structures and so forth was taken from Table 272; the figures in the next line for plant from Table 267; the figures in the line headed "Street mains," from Exhibit AA-233, or Table 228; the figures in the next line entitled "Services" from Exhibit AA-239, or Table 245; and the figures in the other lines headed meters, cocks and connections, office furniture and fixtures, tools and implements, automobiles and accessories, general stable equipment, gas appliances rented and scows, from the fixed capital balance sheet, which I believe is Exhibit AA-246. The total is a computation from the figures, being all the figures in the column.

Q. You have listed the general office building separately?

A. Yes.

Q. And the 57th Street building separately?

A. Yes, from Table 271.

Q. Now, is the table correct?

A. It is.

Q. Now, Table 276, did you make that up or cause it to be made?

A. Yes.

Q. Where did you get your data from for that?

A. That is an estimate of the accrued depreciation on plant, street mains, services and meters as of December 31, of each year, 1905 to 1918. 37460

Q. And is it correct?

Mr. Ransom: I object to that question as purely a matter of the witness' opinion, and he has not shown any qualifications.

The Master: I will take it. Overruled.

Mr. Ransom: Exception.

A. It is.

Q. Table 277, did you make that up?

A. I did.

Q. Is it correct?

A. It is. 37461

Q. What does that show?

A. It shows the adjusted book costs, less depreciation, of fixed capital, 1905 to 1918.

The Master: Less what depreciation?

The Witness: Less depreciation as estimated on this previous table.

The Master: Oh, you have estimated depreciation have you?

The Witness: That was the Table 278.

The Master: Well, who estimated that depreciation on 276?

The Witness: I did not. In other words your testimony is that in your judgment these properties were depreciated as you show it on Table 276?

The Witness: Yes, that the book cost of these properties were depreciated.

The Master: On what theory?

The Witness: On the straight line method of depreciation and the investment age.

Mr. Chambers: Now, I offer in evidence—

Mr. Ransom: See what you get into by letting

37463 that sort of thing in.

The Master: It won't do any harm.

Mr. Ransom: It surely does harm. It is vicious and an unprincipled thing for any witness to undertake to do, especially any witness who has no qualifications.

The Master: What have you got, 277?

The Witness: Yes.

Mr. Chambers: Now, I offer in evidence all these tables, 256 to 277 inclusive.

The Master: They do not run in order.

Mr. Chambers: Well, with the exception of Table 264.

37464 The Master: Well, there are other tables, too. They do not run numerically.

Mr. Chambers: Well, all the tables that Mr. Hine has described, the only exception I know of is 264 and 269, which Mr. Silverman put in.

The Master: There are others.

Mr. Chambers: Well, anyway the tables described by Mr. Hine.

Mr. Ransom: I call your Honor's attention to the fact that with respect to various of these exhibits we go back to 1884 to ascertain book costs, instead of having figures based on book costs

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you get into the question of the substitution of this witness's judgment as to what he thinks is in the Yalden report.

The Master: Objection overruled.

Table No. 256 marked Defendants' Exhibit AA-414.

Table 257 marked Defendants' Exhibit 415.

Table 258 marked Defendants' Exhibit AA-416.

Table 260 marked Defendants' Exhibit AA-417.

Mr. Ransom: I particularly object to this Table 276, which the witness calls accrued depreciation, 1905 to 1918, as applied to book investment, on the ground that it is something the witness is in no way qualified to do, no bases shown, it is applied to book investments, which is an utterly unsound basis in law and in fact, and that he simply undertakes to shoot into this case that which is not in the case, and which does not belong there, and I ask your Honor to exclude this Table 276, Table 277, which is based upon it. If we have got to try out this question of this witness' views on accrued depreciation, there is no limit to what this case involves. 37466

The Master: I will overrule the objections at this time. 37467

The tables were received in evidence and marked as follows:

Table 262, marked Defendants' Exhibit AA-418.

Table 263, marked Defendants' Exhibit AA-419.

Table 265, marked Defendants' Exhibit AA-420.

Table 266, marked Defendants' Exhibit AA-421.

Table 267, marked Defendants' Exhibit AA-422.

Table 268, marked Defendants' Exhibit 423.

Table 275, marked Defendants' Exhibit AA-424.

Table 276, marked Defendants' Exhibit AA-425.

Table 277, marked Defendants' Exhibit AA-426.

Mr. Ransom: I would like to call for the production of any details, tables or working papers with respect to this Exhibit 276. This witness has here given a gross amount which, out of the greatness of his lack of knowledge, he assumes to deduct from this company's investment. There is no way on earth in which that can be checked, there is no way on earth by which his method can be ascertained, he has simply whittled it away without any detail or without any explanation, or plan, he blithely whips out so many millions, so many millions, and we cannot check that in any way for cross-examination, and we have got to get the detail of it, and if the witness has condescended to embody his destructive ideas in any way—

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The Master: Judge Ransom, you can ask the witness what working papers he has for that Exhibit 276, I think it is depreciation.

Mr. Ransom: What detail have you for Exhibit 425?

The Witness: I have worked up the investment year by year as shown in these tables for the various accounts, using the Yalden figures that are contained in Senate Document 47 for the starting point in 1884, and then the books of the company, and these tables for the five years after that date.

Mr. Ransom: Where are your working papers?

The Witness: They are here.

The Master: Mr. Chambers, can some arrangement be made which will save time, so that Mr. Ransom's associates or experts can go over these working papers with Mr. Hine?

Mr. Chambers: At Mr. Hine's office, yes.

The Master: Tomorrow?

Mr. Ransom: Or tonight.

Mr. Chambers: With the exception of, say, three hours on Saturday morning it will be all 37472
right.

The Master: What will we say, 12 o'clock, at Mr. Hine's office?

Mr. Chambers: Will it be all right, Mr. Hine, if you are through with that by twelve?

The Witness: Yes.

The Master. Then suppose you arrange, Judge Ransom, to have one of your associates or experts meet Mr. Hine at his office and go over these working papers and familiarize himself with them by twelve o'clock tomorrow. Next witness.

Q. Mr. Hine, do you recall that Mr. Simpson, was it, gave you a statement—or rather you made a writ- 37473
ten request of Mr. Simpson for certain information?

A. I did.

Q. Have you that request here?

A. I have one with respect to certain information requested with respect to street mains.

Q. Have you found it now?

A. Yes, that is in two sheets here (indicating).

Q. That was in writing, was it, that request?

A. Yes, typewritten.

Q. Is that exactly the way that you submitted it to Mr. Simpson?

A. This is a copy of the memorandum that was typed in his office. I dictated it to his stenographer. I believe I have changed one or two words here in pencil. It was typed this way. I do not know just what changes were made on the copy that was given to him.

Q. Will you state what you called on Mr. Simpson in that memorandum for—for what information?

Mr. Ransom: I object to that.

The Master: Did you do it personally?

The Witness: Yes.

37475 The Master: You gave him a memorandum?

The Witness: I dictated the memorandum to his stenographer.

The Master: Call on the complainant to produce the paper that you gave them.

Q. Have you got the paper?

A. There is one paper with respect to mains and another paper with respect to services.

Mr. Ransom: If Mr. Hine thinks that is substantially correct, why, use that.

The Master: Just offer the paper in evidence.

Mr. Ransom: I would like to have it spread on the record.

37476 Mr. Chambers: So would I.

Mr. Ransom: It is the best commentary on the qualifications of this witness that has yet been made.

The Master: Offer it in evidence.

Mr. Chambers: Yes, I offer it in evidence.

Mr. Ransom: No objection.

By the Master:

Q. Are there two pages?

A. Two pages.

Q. Or two different papers?

A. No, there are two pages. I have not found yet the copy relating to services, a similar request with reference to services.

The Master: The stenographer will mark these two pages as an exhibit.

Mr. Chambers: Well, we both want to have it incorporated in the record; why not have it done that way?

Mr. Ransom: You are going to ignore the pencil changes made subsequent to the dictation, take it as it was dictated?

The Witness: Some of those changes were 37478
made. I am taking off these figures that do not belong here. Some of those were made there at the office before it was given to Mr. Simpson. He has an initial copy.

Mr. Ransom: Of course, I do not know in what form this was dictated, but I think we better get the original if you want to make those changes.

The Master: That is what I thought.

Mr. Chambers: All right, you produce the original.

Mr. Ransom: The document was quite un-
intelligible. 37479

The Master: Get both documents—the one on services, too.

Mr. Ransom: I will have both of them.

The Master: Are you through with Mr. Hine?

Mr. Chambers: You are going to produce both?

The Master: Yes.

Q. Did you get the information, Mr. Hine?

A. No.

Mr. Ransom: I object to the question. Here

37480 are a lot of things that he could make up just as well as anybody else.

The Master: I do not know what it is yet until it gets in the record.

Mr. Ransom: Then I object to the question at this time.

The Master: I think you better hold those questions until you get the papers.

Mr. Ransom: I move to strike out the answer until we get the papers.

The Master: Yes, motion granted.

Mr. Ransom: Most of those things they have
37481 asked for they have put in exhibits on.

Mr. Chambers: That is all, I think, with Mr. Hine.

The Master: All right, his cross-examination is suspended. Next witness.

Mr. Chambers: Now, I would like to bring up the question of pay rolls of officers for 1919, which is being withheld from us.

Mr. Ransom: I do not think that statement is accurate, that it is being withheld from you.

Mr. Chambers: It is correct. It is being withheld from us.

Mr. Ransom: When did you make the demand
37482 or request, this afternoon?

Mr. Chambers: I will tell you in a minute when Mr. Maltbie comes in.

Mr. Ransom: Yes, you made it this afternoon, when you knew Mr. Davidson was here with this great quantity of documents.

Mr. Chambers: Do not make those misstatements as you do repeatedly.

The Master: Call another witness.

Mr. Chambers: I have not any more witnesses tonight.

The Master: Why not?

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Mr. Chambers: I have not any ready.

The Master: Mr. O'Brien, where are your witnesses?

Mr. O'Brien: I have not any witnesses.

The Master: Then are you through?

Mr. O'Brien: I am not through.

The Master: Then I will have to close this case.

Mr. Chambers: It is now—

The Master: I do not care what time it is. Send out for your witnesses and go on with your case.

Mr. Chambers: I do not know whether I 37484
can get any more.

The Master: Is Mr. Maltbie going to be a witness?

Mr. Chambers: He is.

The Master: Then, put him on.

Mr. Chambers: I do not think he is quite ready.

The Master: I do not care; he should be ready. There is no reason why I should sit here on Saturday to suit your convenience. Mr. Bemis has been here all day; if he is going to be a witness call him, send for him. I mean that you telephone for Dr. Bemis or I will close your 37485
case. I have set aside everything to finish this case; then I am met here at five o'clock by the bold statement of counsel that they have not any more witnesses. Mr. O'Brien, I direct you to send for Dr. Bemis. I will wait here until he comes.

Mr. O'Brien: I have a number of witnesses, your Honor, and I will make an effort to get them.

The Master: We'll get them.

37486

Mr. O'Brien: But I want to say to you now that the best that could be expected of counsel conducting the case of the defendants is to produce enough matter that will reasonably be expected to fill up the session of the day.

The Master: I told you gentlemen that you must not gamble on time, that I wanted all the witnesses here continuously until we got through.

Mr. O'Brien: Then, I say, your Honor, you did not make the same rule with respect to the complainant.

The Master: I am making it now and it is
37487 going to be enforced.

Mr. O'Brien: I call your attention to the time you allowed to the complainant to put in their case. I call your Honor's attention to the fact that the defendants' case only began on January 5th and you have applied new rules as to morning and afternoon sessions; that you kept us repeatedly until after 6 o'clock; that you brought us in on a holiday, and that you have applied different rules to us than you did to the complainant.

The Master: Now, notice has been given to you gentlemen that I expected you to call wit-
37488 nesses and I am going to sit here until you call them.

Mr. O'Brien: The work that was mapped out for today was presumed to take up some time and you could have insisted upon cross-examination the same as you required us to proceed.

The Master: Major Clark, have you any further witnesses?

Mr. Clark: I have, but they are not ready today.

The Master: Then you better get them. You

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better get some witnesses: somebody has got to have witnesses here.

Mr. Clark: I have some witnesses for cross-examination; that is all I will have.

The Master: Who have you got for cross-examination?

Mr. Clark: Mr. Frank is here.

The Master: His tables have just been put in and I have suspended his cross to give the complainant a chance to examine them.

Mr. Clark: I have only two other witnesses with respect to some tables and they are not ready. One of the witnesses is sick.

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Mr. O'Brien: I will ask now if Mr. Davidson has produced the data that I demanded be produced several days ago, which I first demanded on last Saturday?

The Master: I am not interested in that. I want a witness on the stand. I am not going to have time wasted with a discussion of some papers or information you want.

Mr. O'Brien: I want to put them in evidence, your Honor.

The Master: Then you will put them in evidence some other time. You had no business to let Dr. Bemis go.

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Mr. O'Brien: I had not planned to put Dr. Bemis on the stand today.

The Master: I do not care when you planned to put him on, I want a witness here; I want some defendant to proceed with his proof.

Mr. Chambers: I would like to continue my re-direct of Mr. Little.

The Master: No, you won't. So would Mr. O'Brien.

Mr. O'Brien: In that connection, your Honor, I assume from what you said earlier in the case

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several times, that if at any time before the case was finally closed it was desired to put a witness on to take care of some matters there would always be that opportunity.

The Master: The record shows what I said.

Mr. O'Brien: That you were not going to hold to any hard and fast rule with regard to that matter.

The Master: The record shows what I said. I never said that with reference to re-direct examination; I said that with reference to cross-

Mr. O'Brien: Well, don't you think that I

37493 ought to have time to look over the record and, if necessary, recall a witness, where it does not mean a long delay to the case?

The Master: We are not going to discuss it at this time. I want a witness; I want the case to proceed.

Mr. O'Brien: I would like to know now whether I am going to be compelled to issue a subpoena *duces tecum* for the production of data that I have requested?

The Master: I want to know now whether you are going to call a witness?

Mr. O'Brien: I will make an effort now to

37494 comply with your Honor's wishes.

The Master: You have not made the slightest effort; you have been standing here for ten minutes trying to use up time.

Mr. O'Brien: I take an exception to that, your Honor.

The Master: You could have gone to the telephone and telephoned for a witness.

Mr. O'Brien: I take an exception, your Honor. I have endeavored to explain to your Honor just my position and I have given it to you straight and frankly.

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The Master: But I stated to you gentlemen when I started in that this case should have been finished in three months' time.

Mr. O'Brien: We have been going from a quarter to ten until practically five, and there is no Court in the land that I know of that would be so exacting and unreasonable about the time to be spent each day as you have been with the defendants in this case.

The Master: This case has got to finish.

Mr. O'Brien: I call that to your attention. I do not know any rule that will authorize you to require us to go on holidays and other days and 37496
stay here the time that we have put in repeatedly. Now, your Honor, in regard to the witnesses that we brought you have required them to come here and be here, and all we ask is that the same reasonable rule be applied to the defendants' case and its presentation as has been applied to the complainant's case. They were not required at any time to stay until after five o'clock; the sessions were only—

The Master: Mr. O'Brien, you know perfectly well that you welcomed every adjournment that I gave the complainant.

Mr. Ransom: And we begged for a chance to 37497
sit all day.

The Master: It would have suited you perfectly well if I had given them weeks and months to call the witness.

Mr. O'Brien: Your Honor, there is no gainsaying what I have told you.

The Master: What you want me to do is to drag this case for two years and I won't do it, it is going to be finished.

Mr. O'Brien: I have not made any effort to drag this case, and none of the defendants have.

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The Master: I do not know whether they have or not, but I know a great deal of time has been wasted.

Mr. O'Brien: Has been wasted by me?

The Master: Yes.

Mr. O'Brien: In what respect?

The Master: In the extent of your cross-examination, when we got to the point where you were repeating over and over again and I finally had to take witnesses off the stand. But that does not get us anywhere. You promised to go out and telephone for a witness and you have

37499 not done it yet. If Mr. Chambers will put Mr. Maltbie on and use the rest of the afternoon until six o'clock you need not bother.

Mr. Chambers: I will try to.

The Master: Then, go ahead.

Mr. Chambers: I want to clear up this pay roll business.

The Master: Give us something useful. We will get pay rolls some other time. If you are just going to question Mr. Maltbie in order to have an argument as to whether you got some information this afternoon or not, Mr. O'Brien better telephone for his witness.

37500 Mr. Chambers: I am calling him on working capital.

The Master: All right.

Mr. Chambers: Then why don't you see that we get these pay rolls?

The Master: I will attend to that.

Mr. Chambers: I was not quite ready to call Mr. Maltbie, but to please the Master I will call him.

The Master: It is not a question of pleasing me. I do not want to come here tomorrow. If

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you fill in this day until 6 o'clock I will adjourn to Monday morning.

Mr. O'Brien: But, your Honor, won't you see when we are putting in this case that we have a reasonable time in the afternoon to arrange our case? You would make as much progress in that way as by forcing us to put the case in up to six o'clock.

The Master: That is a question of judgment. If my day is filled up to six o'clock, I will adjourn until Monday morning.

Mr. O'Brien: Will your Honor make some direction or suggestion to the complainant as to the data that I requested. 37502

The Master: What is it?

Mr. O'Brien: I can have a subpoena issued, if necessary.

The Master: That is the quickest way. If you do not get what you want immediately upon request, issue your subpoena and bring him here.

Mr. Ransom: And make your requests so that they are understandable.

Mr. O'Brien: I have made it on the record and I have made it in writing to Mr. Davidson.

The Master: You serve the subpoena.

Mr. Ransom: It is utterly unintelligible. 37503

The Master: If I ask counsel on the other side to give me some papers and they do not do it, I always serve a subpoena and bring them down.

Mr. Ransom: Mr. Clark gets up a list and the papers are promptly produced, because he indicates what he wants and knows what he wants.

37504 Milo R. Maltbie, Direct.

MILO R. MALTBIE, called as a witness on behalf of the defendants, being duly sworn, testified as follows:

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Maltbie, you reside in the City of New York, do you not?

A. I do.

Q. And what is your occupation?

A. Public utility consultant.

Q. Valuations?

Mr. Ransom: I object to it. The question is
37505 vague and indefinite it means nothing.

Mr. Chambers: I said "valuations"—of public utilities, I will just add that

Mr. Ransom: I object.

The Master: I will allow it.

Mr. Ransom: Exception.

A. Yes.

Q. Rate cases?

A. Yes.

Mr. Ransom: What do the questions mean?

The Master: I suppose those particular questions are objectionable. Why don't you place on the record the fact that Mr. Maltbie was a Public
37506 Service Commissioner for the First District for a number of years.

Mr. Chambers: I am going to do all that.

The Master: And I will take his opinion. What is the use of fussing about it?

Q. Franchises, engineering, accounting, lighting contracts and financial investigations of municipal and private utilities, Mr. Maltbie?

Mr. Ransom: I object to that. I do not think in any such blanket way you can prove qualifications.

Mr. Chambers: I am asking his occupations.

Mr. Ransom: The fact that a man for a time occupied a public office until Colonel Hayward conducted the investigation is not a qualification.

The Master: I am going to rule in this case that if Mr. Chambers will spread on the record the fact that Mr. Maltbie—for how many years?

The Witness: Eight years, nearly.

The Master: (Continuing.) Was Public Service Commissioner for the First District, having jurisdiction over gas companies, with all the questions that arose in that office, I shall rule 37508
he is qualified to give his opinion on this matter.

Mr. Ransom: Will you also spread upon the record what Colonel Hayward said about him?

The Master: No, I do not care what Colonel Hayward said about him. There was one time that I said some things of Mr. Maltbie—and to him.

Mr. Ransom: Exception.

Q. You said yes to that question?

A. I did.

Q. From November, 1917, to November, 1918, what work were you engaged in, Mr. Maltbie?

A. I was called by the Acting Chief of Ordnance 37509
to advise the Ordnance Department of the War Department, the Ordnance Division of the War Department, in connection with the negotiation of contracts for the construction and operation of toluol plants, where such plants were built in connection with artificial gas companies; and also later asked to take charge of the purchase of toluol for the War Department. I did that work beginning in the fall of 1917 and continued until some time in the spring of 1918, about April I believe. At that time I was asked to take charge of the Property Section of the Housing

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Department, Emergency Fleet Corporation, the work with the Emergency Fleet Corporation having to do with the appraisal of land, the acquirement of land by purchase and by requisition, "commandeering" as it is frequently called, the negotiation of contracts with public utility companies for the extension of their facilities to the housing districts which the Emergency Fleet Corporation was erecting, which position I held until about the summer of 1918, when I was asked by Mr. Hurley, Chairman of the United States Shipping Board, to become adviser to him on the negotiation
37511 and letting of contracts having to do with advances by the United States Government to public utility companies for the construction of additional power facilities, and this work I was doing when the armistice was declared, whereupon I resigned from the department.

By the Master:

Q. When were you Public Service Commissioner, Mr. Maltbie?

A. From July 1st, 1907, to April 1st, 1915.

Q. Of the State of New York?

A. Of the State of New York, First District.

Q. What district?

37512 A. First District.

Q. And you had under your jurisdiction as one of the commissioners all of the public utility corporations in the First District?

A. Yes, all but the portion of the railroads which was under the jurisdiction—that is the steam railroads—of the Second District Commissioner, and the telephone companies which were entirely under the jurisdiction of the Second District Commissioner.

Q. As Public Service Commissioner did you have to deal with problems arising out of the issuance of stocks and bonds and the capitalization of companies.

A. Most of the companies having to do with those matters were referred to me; that is, I presided at the hearings, prepared the opinions and submitted them to the Commission. I think the entire amount of money involved in those cases at that time was about $620,000,000.

Q. Did that include gas companies?

A. That included gas companies, electric lighting companies, street railway companies and railroad companies.

Q. In that work did you have to familiarize yourself with the character of gas plants, the holders and 37514
distribution system, matters of that kind?

A. I also had referred to me in the same way practically all of the rate cases relating to gas and electric rates. There may have been one or two exceptions but practically all of them—practically all of the cases relating to gas and electric service, some of the cases relating to street railway service; and in the course of those cases findings were made including appraisals of gas and electric properties, amounting to about $125,000,000.

Mr. Chambers: I would like to get just a few more things.

The Master: Do you question Commissioner 37515
Maltbie's qualifications to testify on the question of working capital?

Mr. Ransom: I certainly do.

The Master: Then go ahead, Mr. Chambers.

By Mr. Chambers:

Q. From January, 1916, to January, 1918, you were chamberlain of the City of New York?

A. I was.

Q. Handling about how much money annually?

A. Well, about $800,000,000 in one year and about a billion dollars the second year.

Q. Were you adviser to the mayor upon gas, electric light and telephone rates?

A. I was, and other public officials.

Q. Contracts, New York Central improvements and other various franchises and utility matters?

A. I was.

Q. From July, 1915, to May, 1916, you were a member of what board?

A. I was a member of the advisory board of the Interstate Commerce Commission. The functions of this board were to advise the Commission on the
37517 methods and principles to be adopted in the valuation of the railroads of the United States. I also made two special investigations at their request, one being an accounting investigation and report of the Norfolk & Southern Railroad System, or Railway System, I have forgotten the complete title, and the Winston-Salem Southbound Company.

Q. April, 1915, to July, 1915, did you represent the State Railroad Commission on valuation matters before the Interstate Commerce Commission?

A. I did. I resigned from that position to become a member of the advisory board of the Interstate Commerce Commission.

37518 Q. You have spoken of your experience as a Public Service Commissioner. You were a member of the Public Service Commission for the First District —a member of the very first commission after the law was created?

A. Yes.

Q. I think you stated that that lasted from July, 1907, to April, 1915?

A. Correct.

Q. From February, 1906, to June, 1907, do you recall what business you were engaged in then?

37519

A. I was in charge of an investigation into the relative merits of municipal and private operation in Great Britian, which included an investigation into twenty-five plants about equally divided between municipal and private plants.

The Master: Of what character, what kind of plants?

The Witness: Gas, electric, and street railways. Those twenty-five plants were selected by the committee upon this side and I was sent to Great Britain with certain gas and electric and street railway engineers and accountants, and em- 37520
ployed certain others, to direct their work abroad. We investigated and prepared reports on twenty-four of those plants and when the reports were finished I prepared the analysis and final report on those plants and upon franchise matters which were not investigated by the accountants or the engineers.

Q. From 1897 to 1906 do you recall what matters you were engaged in?

A. I was during that period investigating utility matters for a number of associations and committees —the New York Merchants Association, the Ramapo Investigation. 37521

Q. The New York Reform Club?

A. Yes, and the Civic Federation of Chicago, being an investigation into the accounts of the street railway systems of Chicago, the work of accountants being completed and turned over to me for final analysis and report, and the report submitted to the Civic Federation. During that period there were a number of similar things, reports and investigations made to various bodies on utility and franchise matters.

Q. Did you lecture upon Municipal Government at Columbia University?

A. I did, for one year.

Q. And were you at one time editor of Municipal affairs?

A. I was.

Q. In 1895 to 1897, you attended Columbia University?

A. I was a student in the School of Political Science at Columbia University, and I graduated from there in 1897, with the degree of Doctor of Philosophy.

Q. In 1903 to 1905 you were Professor of Mathematics?

37523 A. I taught economics and mathematics in the College of Illinois.

Q. From 1892 to 1893?

A. I was a student in Northwestern University.

Q. And you graduated from that university?

A. Yes.

Q. With what degree?

A. Master of Philosophy.

Q. And in 1892?

A. I graduated from Upper Iowa University with the degree of Bachelor of Philosophy.

Q. Recently you have been engaged in confiscatory or rate cases, have you not?

37524 A. I have been engaged in rate cases and valuation cases.

Q. You have testified, for one case, in the Albany Gas Company, at Albany, on working capital and depreciation and other subjects?

A. And overhead expenses and things of that sort.

Q. And used and useful, to some extent?

A. To some extent; that is, whether certain property was used and useful to some extent.

Q. And you had charge of the Minneapolis situation, did you not?

A. I made a report for the City of Minneapolis about a year ago, in the course of which I determined the value of the property and the rates to be charged for gas in the City of Minneapolis.

Q. In Haverhill, Massachusetts, was it?

A. No, I was not connected with that.

Q. What other cases do you remember being connected with recently?

A. Well, just recently I prepared the case in the Utica Gas case for the City of Utica before the Public Service Commission, and in that case I had charge of the entire matter, including the presentation of wit- 37526
nesses, their examination, their cross-examination. That included the valuation of the property and the fixing of the proper operating expenses. I also have been advising the City of Rochester in connection with their street railway rates recently, about a year ago.

I am and have been retained by the City of Buffalo to take charge of the telephone case for the City of Buffalo. I am also advising the committee of the Corporation Counsel to the City of New York in telephone cases through the State of New York. I prepared a report for the University of Toledo upon the street lighting rates and methods in the City of 37527
Toledo. I did part of the work on the Norfolk Gas case. I did not have charge of all of that there, but a part of it, and testified in that case as to working capital, overhead expenses and things of that sort.

I made an investigation of the electric light rates in the City of Lexington, prepared a franchise, made recommendations as to rates for a four year period, prepared a system of accounts for that company, and they are all in operation today. I advised the Public Service Commission of the State of Pennsylvania in the electric rate case for the City of Philadelphia.

37528 and was chairman of the committee of three that determined the cost of the property of the electric company in the City of Philadelphia, and advised the commission on the value of the property and the rates to be charged in the rate case in the City of Philadelphia. I advised the Corporation Counsel of the City of Boston in connection with their street lighting arbitration matter, was called to testify recently in the arbitration in Cleveland as to certain matters in their cost of service franchise which they have there. I presume there are some others.

37529 Q. Well, you have been retained by the corporation counsel of various up-state cities or some cities in regard to telephone rates, have you not?

A. Yes, I mentioned that. Then I have had a number of smaller cases where I have been retained by associations and private corporations in utility and rate matters

Q. Can you state generally what is working capital upon which a return should be allowed in rate cases?

Mr. Ransom: I object to the question and desire to state my objection upon the record, if your Honor has any view that the witness is qualified. The witness has now talked for about

37530 fifteen minutes describing various things that he has done. I do not question at all that for any lawyer representing an attorney general or corporation counsel or other public authority, Dr. Maltbie is a very valuable man to have at his elbow as sort of a special advocate in the suggesting of material and in the plotting of the defense of a case and advising methods of minimizing the investment of companies. But, as was said by the Federal Court—

Mr. Chambers: Is this an objection or a speech?

37531

Mr. Ransom: I am stating an objection.

Mr. Chambers: It sounds like a speech.

Mr. Ransom: As was said by the Federal Court in the Des Moines gas case regarding Professor Bemis, there is a very great difference between information gained by investigation and by statistics and that gained by actual experience in the business; and especially with respect to a matter like working capital.

Here is a man who has never had any relation, by his own long statement, to a business enterprise where he had responsibility, had to see to it that the company had the funds to keep 37532
going, the funds to meet current accounts, the necessity of keeping the adjustment between income and outgo. He has not had in any instance, in any respect, the kind of business judgment and experience which entitles him to express an opinion upon what a company ought to have in the category of working capital. He never operated one, he does not know what materials and supplies they have to have on hand. The whole field of working capital required is peculiarly one which a man of business experience is required to know. The idea that merely because he has sat in a quasi-judicial capacity as a member of 37533
a commission, and has listened to evidence that has been produced by persons qualified, does not make him qualified. On that basis the best witness of all would be the Commission's stenographer.

The Master: If Mr. Chambers will limit his question to the working capital required by a gas company—

Mr. Chambers: Yes.

The Master: I will overrule the objection.

Mr. Ransom: Exception.

Mr. Chambers: Yes, meaning gas companies.

Mr. Ransom: I make the further objection, which I had not finished, that the question of the elements in that respect, if they are not questions of business judgment, are questions of law, and while Mr Maltbie has made very extensive investigations for various organizations engaged in promoting various propaganda, he is not a lawyer.

The Master: I am going to take his opinion.

Mr. Chambers: He knows a lot more than
37535 some lawyers know.

The Master: I did not ask Mr. Chambers to get into an argument. Reframe your question by limiting it to gas companies. Withdraw your last question.

Mr. Chambers: Yes.

Mr. Ransom: I object further that it is not a matter of any such broad or general expression as that.

The Master: The objections are overruled.

Mr. Ransom: Exception.

Q. What is working capital generally upon which a return should be allowed in rate cases, limiting
37536 your answer to gas companies?

Mr. Ransom: I object to the question as too broad, vague and indefinite.

The Master: Overruled.

Mr. Ransom: Exception.

A. As I understand working capital, it is the materials and supplies, the cash or the capital in any form, which a company must provide in advance of funds being repaid to it by collections through consumers, such capital being the amount upon which they are required to pay either dividends or interest.

Q. Does it include funds or property upon which the company is not required to pay interest or dividends?

Mr. Ransom: Objected to as incompetent.

The Master: Overruled.

Mr. Ransom: Exception.

A. It does not, in my opinion.

Q. Is it proper to determine working capital by adding together the amounts shown upon the company's books for cash on hand, materials and supplies and accounts receivable?

Mr. Ransom: Objected to as incompetent. 37538

The Master: That is, is it in your opinion proper?

Mr. Chambers: Yes, in your opinion.

A. It is not.

Q. Why is it improper to accept the cash shown by the company's records to be available as working cash capital?

Mr. Ransom: I object to the question; it is incompetent. On the further ground it does not bear on any issues of this case, because no one has proposed doing any such thing.

The Master: Overruled.

Mr. Ransom: Exception. 37539

A. In the first place, cash in the treasury of a company may be from various sources and may be provided for other purposes than working capital. Most companies have construction work which is going on all of the time, for which it is necessary to provide funds to meet bills.

The Master: Dr. Maltbie, I am going to interrupt you. I think that I shall limit the inquiry to meeting the testimony of Mr. Carter, who testified that certain items should be included in the working capital. Now, I want you to direct your

questions to the items which Mr. Carter, representing his company, claimed they were entitled to as working capital.

Mr. Chambers: This does.

The Master: These are entirely too general. Get to specific items. He included, as I recall it, certain merchandise on hand, certain supplies, certain receivables, certain particular figures. I have not got them before me, but I think you ought to direct your attention to those items testified to by Mr. Carter, so we can have clearly
37541 the issue as between Mr. Carter and Dr. Maltbie.

Mr. Chambers: I was just coming right to that

Q. Cash is also accumulated to pay interest and dividends, is it not?

The Master: I will sustain the objection.

Mr. Chambers: There was not any made.

The Master: I will sustain it anyhow.

Mr. Ransom: I have objected to all this line.

The Master: You must limit it to a form that will be useful on the record, and I think this is entirely too general.

37542 Mr. Chambers: Exception.

Q. I want to know why cash shown by the company's records—why it is improper to accept that, as I understand Mr. Carter did do to a certain extent.

Mr. Ransom: I object to that. Mr. Carter did not do any such thing.

The Master: No, I will sustain the objection.

Mr. Chambers: Exception.

Q. Take the materials and supplies?

The Master: Where is Mr. Carter's statement? Have you got it here?

The Witness: I have it here, I think.

37543

Mr. Ransom: There was a million and a half cash.

The Master: Mr. Carter testified to about $4,600,000.

Mr. Chambers: Didn't he use cash shown by the company's records?

The Master: I do not know what you mean by that. Mr. Carter testified that he made up the working capital as including—

Mr. Ransom: That was in the prior case those figures, I believe, that are on the top there. I have not got the details yet giving the—

37544

The Master: Well, he included accounts receivable, materials and supplies and cash on hand, yes. Those are the three items that he said went into working capital.

Mr. Chambers: That was what my question was directed to exactly.

The Master: What was your question there?

Mr. Chambers: Why shouldn't they use cash shown by the company's records? He was answering.

The Master: I do not know what you mean by cash shown by the company's records.

Mr. Chambers: Well, "cash on hand," I suppose would be the term.

37545

Mr. Ransom: Mr. Carter did not do that.

The Master: Well, cash on hand.

Mr. Chambers: That is the same thing, is it not—substantially the same thing?

The Master: I don't know.

Mr. Ransom: Mr. Carter testified to an amount of cash that he said was necessary. It did not coincide with the book figure at any particular day.

The Master: The answer to it is this, Mr. Chambers—that it does not get us anywhere.

37546

Mr. Chambers: Yes, don't you want to know why you do not take the cash shown by the company's records?

The Master: If it does not meet Mr. Carter's testimony it is perfectly useless to us.

Mr. Chambers: Yes, it does. Certainly it does.

The Master: You may be right technically in the form of your question, but I confess I do not get it—why you frame it just that way. Mr. Carter's testimony in substance was that in addition to the accounts receivable, materials and

37547 supplies, there must be an amount of cash kept on hand.

Mr. Chambers: Yes.

Mr. Ransom: I call your attention to Mr. Carter's testimony on page 8392, where he was asked specifically whether the amount which he took for working capital, cash on hand, corresponded to the book items. That shows clearly that he did not take the book item and that he based it solely on his judgment and experience.

The Master: I will sustain the objection. I will let you bring out from Dr. Maltbie his judgment and his opinion as to whether the com-

37548 pany should or should not have any cash on hand as part of working capital, and, if so, how he figures it, if he allows any. I will sustain the objection to the question in the form in which it is put.

Referring to this page of the testimony of Mr. Carter, the question was: "Q. How much cash?" and he said, "A. $1,500,000." Then the question was: "Q. The item of $1,500,000 for cash, is that more or less than the cash on hand in fact as of December 31st, 1918? A. It is slightly

more than the balance of cash in the banks of the company, the banks in which the company deposits its funds as of that particular date, that being somewhere between $1,200,000 and $1,300,000. That amount of course varies. It might run to one million dollars and it might run to two million dollars. In fact, there are times when our cash balance amounts to several million dollars. I believe that $1,500,000 is the smallest amount of cash which on the average this company should carry to meet its requirements and its obligations."

37550

If Mr. Maltbie does not agree with that statement of opinion by Mr. Carter I will let you bring out his judgment.

Q. Then state, Mr. Maltbie, if you can, just what cash in your opinion the company should have.

The Master: This company should have as part of its working capital.

Mr. Chambers: Yes.

Mr. Ransom: At the present time.

Mr. Chambers: And why?

Mr. Ransom: Under present conditions.

The Master: Yes, in 1918 or 1919 or 1920. Let us have your views about that. I will take it.

37551

A. Well, for the year 1918 in my opinion the amount of cash necessary for working capital and for working capital only, not for any other purpose for which cash might be used, in the treasury of the company, but for working capital only is $550,000.

By the Master:

Q. And have you got figures for 1919?

A. I have figures back to 1906.

Q. No, I do not want them way back then. I will take 1918, 1919 and 1920, if you have estimated it.

A. I have not prepared them for 1919.

Q. Or 1920?

A. Or 1920.

Q. Then take 1918.

A. 1918 I gave you, $550,000.

Mr. Ransom: This is all over my objection and exception.

The Master: Yes.

Mr. Ransom: I think the idea of letting a man who never had any such responsibilities as to any company whittle away the amount which is
37553 testified to by persons of business experience—even the defendants' expert, Mr. Little, gave a figure that was higher than Mr. Maltbie's and higher than Mr. Carter's.

The Master: I do not know why you should complain about it.

Mr. Ransom: I say even Mr. Little gave figure higher than Mr. Carter.

Q. Tell us, Mr. Maltbie, how you arrived at that figure?

Mr. Chambers: Just a minute. In regard to Mr. Little's testimony I was not allowed to ask him on re-direct what he meant by working cap-
37554 ital because the Master shut me off. He would have explained fully what he meant by it if he had been allowed.

The Master: I saw clearly the tactics followed this morning to get the examination over beyond the noon hour recess and I was not going to permit it.

Mr. Chambers: I think you ought to let me recall Mr. Little Monday.

Q. How do you arrive at $550,000 for 1918?

A. Well, in the first place this company does not manufacture all of the gas which it sells, on the tes-

37555

timony in the record; it pays the bills to the Astoria Company about the 20th of the month, from the 20th to the 25th. Consequently, it does not have to advance money for materials and supplies and for pay rolls during the month which a company would ordinarily have to advance, and consequently the amount of money that it has to have on hand to carry that business is smaller than a company would need where it had to carry the entire amount.

Furthermore, in this case it has been testified that the bills for oil and coal are paid from the 20th to the 25th of the month for the month ending upon the 1st, so that the large part of the two most important materials consumed in operations of the company are paid from 20 to 25 days after the end of the month covered in the bills to the consumers.

37556

Now, it appears from an analysis of the accounts receivable as of December 31st for these years, and July 1st, that the amount of money due from consumers at the end of the month, as shown by these two dates, bearing in mind that they have continuous meter readings, are less than one month's bills upon the average to consumers, which indicates that consumers upon the average pay their bills to the company about 20 to 25 days after the bills are rendered. That is on the average. Now, taking into account all of these matters in my opinion from two to three per cent is ordinarily all that is required in cash to provide against operating expenses before they are able to collect the money from the consumers.

37557

Q. Two or three per cent of what?

A. Two or three per cent of the entire amount of money that is handled in a year. For instance, when I was City Chamberlain one of the important questions was how much money to keep on hand in order that the pay rolls and all of the bills should be met from time to time.

Mr. Ransom: I object to that. There is no analogy between the Corporation Counsel's office and a gas plant.

Mr. Chambers: He did not say the Corporation Counsel's office.

Mr. Ransom: Or the City Chamberlain's office.

Q. I would confine myself to the gas business. You say that it ought to be from two to three per cent of the total revenue of a gas company?

A. Yes.

37559 Q. Ordinarily?

A. Yes.

Q. What is that based on?

A. As I say, that is based on the studies that I made when a member of the Public Service Commission in deciding this very question as to how much working capital should be allowed and based upon how much they ordinarily carried.

Q. Actually?

A. Actually carried, devoted merely to working capital. Of course, this company has carried, as shown by its balances at the end of the years—has carried amounts which range, as I recall, from some

37560 thing less than three-quarters of a million of dollars up to five and six million dollars.

Mr. Ransom: And seven.

The Witness: Yes, maybe as high as that. That money is carried for other purposes. This company has big investments.

The Master: Do not let us get into that.

Q. You were saying that generally speaking two or three per cent of the gas company's revenue is considered a proper sum to set aside for working capital, cash working capital?

A. Cash to carry, on an average.

 37561

Q. Were you going to modify that as to this company?

A. No, this company is different from an ordinary company, because it does not make all of its gas.

Q. Then you are reducing the two or three per cent, are you?

A. No I was going to add this factor, that in 1918 I have increased it somewhat because of the fact that during the war, in my opinion, and because of the uncertain conditions that existed the company was entitled to a little more than they would be under ordinary circumstances, where they could fore see with the usual definiteness as to what their bills 37562
would be for the management and ordinary conduct of the company, and what their receipts would be. A gas company having continuous meter readings gets its money coming in in a pretty regular stream as far as the management of the company is concerned, not talking about extensions or betterments or anything of that sort. Its expenses are more or less normal and its receipts are more or less normal; that is, they do not show the peaks and fluctuations from day to day that many companies do usually. In my opinion $550,000 in 1918 is a fair amount for work'r g capital.

Mr. Ransom: I move to strike out the testi- 37563
mony of the witness up to this point.

The Master: Motion denied.

Mr. Ransom: Exception.

By Mr. Chambers:

Q. Have you made some study of the records of the company in the light of working capital?

A. Well, I made a study of all of these items as carried by the company for this entire period from 1906 to 1918, both as to cash and as to materials and supplies of various sorts—stoves and appliances which

they have carried: their operating expenses as they fluctuated, and of their gas purchases.

Q. And this is from their books?

A. From the statements furnished to me, compiled from their books.

Q. In 1918, what about materials and supplies on hand?

Mr. Ransom: I object to the question. The witness certainly has no qualifications on that kind of matter. It appears from the testimony the witness has already given that all he is presenting is sort of an animated argument as an advocate, which he should give through the mouth of counsel rather than in the guise of testimony on the stand.

37565

The Master: Overruled.

Mr. Ransom: Exception.

A. For materials and supplies used for gas making purposes and for repairs as distinguished again from construction supplies used for construction purposes, I have estimated an amount of $700,000 for the year 1918.

Q. Do the books of the company reflect the terms of purchase?

37566 A. Well, the records of the company.

Q. The book account, I mean.

A. The book account does not. The bills payable do not reflect the terms of credit, nor does the materials and supplies account carried on the company's books reflect the terms of credit, because the materials and supplies are charged to the various materials and supplies accounts as delivered and receipted for, and if they are paid for thirty days from that time the materials and supplies account of course does not show that—none of them show it.

Q. And many materials are used for construction,

such as additions to mains, as you have found with this company?

A. Yes.

Q. And the complainant company does work for other companies and not for itself alone, you have found that out?

A. Yes, that has been so testified.

Q. Residuals are paid for in the case of making gas—residuals expenses?

A. I have allowed for that, the cost.

Q. In regard to accounts receivable for 1918, has the complainant company included in the accounts 37568
receivable amounts due from the City of New York, the rate which is not in dispute?

A. There were shown in the accounts receivable for all of the years, and for a number of years the accounts receivable showed an amount due from the City of New York, when the suspense account on the other hand, carried a very large amount, something like $2,000,000 as having been paid. Now, I have eliminated all of the accounts receivable due from the City of New York on the ground that the City rate was not in dispute and the time that the City had to be carried for its public lighting was a matter to be dealt with in determining the reasonable rate for street 37569
lighting or gas for public lighting and had nothing to do with the rate for general consumers.

Q. Why are not accounts receivable a proper index of the amount needed for working capital?

Mr. Ransom: I object.

The Master: He did not say they were.

Mr. Chambers: I am asking him why they are not.

The Master: He did not say they were not.

Mr. Chambers: Why are they not?

The Master: Well, are they or are they not?

Mr. Ransom: I object to the question. The company eliminated a very large amount of its accounts receivable.

The Master: Are accounts receivable any part of the property to be figured in working capital?

The Witness: I should, in determining the amount allowed for working capital examine the accounts receivable to determine how they were made up and what they were; but to take the amount as shown on the books as evidence of
37571 what should be allowed for working capital is not, in my opinion, a proper way to do.

Mr. Ransom: I move to strike out the answer as not responsive.

The Master: Objection overruled, motion denied.

Q. And accounts receivable very often include non-operating accounts?

A. They do.

Q. And items charged to accounts receivable include not merely cost of making gas but items for reserve taxes not yet due and taxes and interest for dividends?

37572 Mr. Ransom: I object to the question. The company has not done any such thing as the line of questioning supposes.

The Master: I think Judge Ransom is right about that question. I do not think that is the way to bring that out. I think you ought to ask Dr. Maltbie, based upon his knowledge of the facts in this case, the amount of receivables and the character of receivables, and the character of materials and supplies, how much he thinks they ought to have for 1918.

37573

I shall expect counsel to have ready at 9:30 Monday morning all of their witnesses and all the tables and all of the evidence that they are going to put in.

Adjourned to Monday, February 16, 1920, at 9:30 o'clock A. M.

Last Complainant's Exhibit No. 467.
Last Defendants' Exhibit No. AA-426.

37574

37575

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 37579

Before: ABRAHAM S. GILBERT, Special Master.

NEW YORK, February 16, 1920.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for Defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 37580
MR. O'BRIEN, of Counsel for Defendant Swann.

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JOSEPH QUINN, recalled.

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Quinn, have you looked up Block 1,092, Lot 7?

A. Yes, sir.

37581

Q. And when you were on the stand before you gave the assessed valuation of that whole block and lot, did you not?

A. Yes, sir.

Q. For the year 1914 are you able now to give us the relative proportion of Parcel A as shown on this Sheet 8 of Defendants' Exhibit AA-126, that it bears to the whole lot?

Mr. Ransom: I object to the question on the ground previously indicated to questions of this type, the witness did not do any such thing, his

statutory duty did not call for the doing of any such thing, and hypothetical, pure assumption, not based on the true factors.

The Master: Objection overruled.

Mr. Ransom: Exception.

The Master: That is that 75-foot strip you want to take out of there, is it?

Mr. Chambers: No, that is another parcel.

The Master: Have you made that calculation?

The Witness: Yes.

The Master: Well, give it.

37583 Mr. Ransom: Well, they had it before.

The Witness: No, I did not.

The Master: Well, let us have it.

A. For the year 1914.

Q. 1914, 1915, 1916, 1917 and 1918?

A. For the year 1914, $195,000.

Q. For that Parcel A shown on this Sheet 8?

A. Shown on this Sheet 8.

Q. Of that Exhibit AA-126, unimproved that is?

A. Yes, sir.

Q. Now, 1915?

A. $195,000.

Q. 1916?

37584 A. $195,000.

Q. 1917?

A. $20,000.

Q. 1918?

A. $20,000.

Q. That is as far as you go?

A. That is as far as I go, sir.

Q. That is wholly unimproved?

A. That is unimproved.

Q. And that is the relative proportion that that Parcel A bears to the whole assessment?

A. Yes, sir.

Q. Is that in your opinion the full value of Parcel A for those years?

A. Yes, sir.

Q. And the sum for which it would sell in your judgment if wholly improved?

A. Yes, sir.

CROSS-EXAMINATION BY MR. RANSOM:

Q. That figure which you have given for that portion of the parcel is obtained simply by ascertaining the relative proportion of area and taking the same proportion of the total assessment?

A. With the same unit, yes, sir. 37586

Q. And with the same proportion of plottage on the small parcel as on the large?

A. Yes, sir.

Q. Would you add as much for plottage on the small parcel as on the large?

A. Did I add as much?

Q. Would you, if you were making an independent assessment?

A. Yes, I would add the ten per cent plottage.

Q. You would?

A. Yes, sir.

Mr. Ransom: That is all.

The Master: Now, Mr. Maltbie. 37587

Mr. Chambers: No, I would like to call some others so they can get away.

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NATHANIEL SILVERMAN, recalled:

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Silverman, did you prepare a table designated for convenience Table 117?

A. Yes, sir.

Q. And where did you get your data to use in making up that table?

A. I got that data from the assessments shown in Exhibit AA-241.

Q. And on that you put down the block and lot, and the map refers to the Exhibit AA-120, does it not?

A. I am not familiar with that particular exhibit. I can recognize it if you show it to me.

Q. This refers to this (exhibiting paper)?

A. Yes, sir.

The Master: That is Exhibit AA-120?

37589 The Witness: Yes, sir.

Q. And is the table correct?

Mr. Ransom: I object to the question because it appears that according to his own statement he has taken this data from an exhibit which was quite thoroughly proven full of errors on cross-examination.

The Master: This table will be of no use to us, if it is. You say the figures set down here are correct, based upon the data that you took?

The Witness: I said the source of these assessment figures are the assessments shown on Exhibit AA-241.

37590 The Master: Yes. Now, these figures that you have set down here are correct in accordance with that exhibit?

The Witness: These figures set down here are correct in accordance with the instructions that I had to make them up.

Q. Now, that leads up to another question. You take Block 989, Lot 1, Parcel 1, the sum of $1,605.03, will you please explain that?

The Master: 989?

Mr. Chambers: Block 989, Lot 1, Parcel 1, Map 4, $1,605.03.

The Master: Yes.

Mr. Chambers: As shown in this table?

The Master: What about it?

Mr. Chambers: I asked him to explain it.

A. May I see Exhibit AA-126, please?

Mr. Ransom: What is there to explain?

Mr. Chambers: Oh, now, don't interrupt.

Mr. Ransom: I object to the question. There is nothing about it that calls for explanation.

The Master: Objection overruled. Bring out your explanation by a leading question.

Q. Well, now, that parcel, Mr. Silverman, you apportioned, did you not? 37592

A. I can tell just exactly how it was made up, if I can have a minute to look at my working papers.

Q. Yes, do, and then there are a few others and tell the Court exactly how you reached that figure. You found the assessments on that whole lot and block were more than that sum, of course?

A. I can tell in a minute.

Q. You have to fix it for Parcel 1?

A. Why, that $1,605.03, from 1884 to 1905, is made up of several assessment charges applicable to that particular part of the block, or that parcel, amounting to $1,415.03, dating from 1891 to 1901, and that 37593
is in 1891, and then under the date of June 4, 1901, we have an item of $211.12, which was pro rated 90 per cent to Parcel 1 and 10 per cent to Parcel 2, and the amount of that pro rate was approximately $190, making $1,415.03 to 1891 and $190 for 1901, or a total of $1,605.03.

Q. Now, the next one, 989, Parcel 2, your explanation covers that also?

A. The same explanation covers that. There was in 1901, $184.70 applicable to Parcel 2, and in 1902

the remaining 10 per cent of the $211.12, $21.12, approximately, making a total of $205.82.

By the Master:

Q. What do you mean, the assessment, the total assessment was against the total piece?

A. It was against the total Block 989.

Q. The total plot?

A. Yes, sir.

Q. And you have undertaken to take 90 per cent of it and apportion it to Parcel 1, and 10 per cent of it to Parcel 2?

37595 A. No, this assessment of $211.12 was only against this particular portion of the block.

Q. Yes. I mean the other one that you divided 90 per cent and 10 per cent?

A. That is the only one I divided 10 per cent and 90 per cent, that $211.12.

Q. On what theory did you take that 90 per cent?

A. Well, taking the entire basis as 100, practically on an area basis.

Q. Well, how do you know that the greater part of the assessment did not go against Parcel 2, as a matter of fact?

A. Well, as a matter of fact the assessment as of

37596 that particular time, was so small that we made that distribution approximately.

Q. I am not concerned about the amount of it. What I am concerned about is the principle of it. As a matter of fact, this assessment—what was it for, was it for a sewer or street opening, or what?

A. I will see if I can tell you that. I think I can.

Q. It might very well have been to a very large extent on this narrow strip, Parcel 2?

A. I think I can tell you what it was for. It was alteration and improvement of receiving basin, northwest corner of 13th Street and Avenue O.

Q. Avenue D?

A. Yes, sir, and was assessed against Block 989, Lot 1.

Q. Avenue D is furthest away from Parcel 1. You can't apportion assessments that way.

A. That was the only item there that was apportioned on that basis.

The Master: Well, it is all wrong.

Mr. Ransom: It is a picayune whittling away of the property, which they have tried to do all the way through.

The Master: Assessments are levied with relation to the benefit to the property, and the nearer it is, the more it may be, and it may be distributed on an entirely different basis. This particular amount don't involve very much, but the whole theory is wrong. 37598

The Witness: The assessment was levied against the entire lot and block.

Mr. Chambers: Will you state how you know which part of it it was against?

The Master: I don't know.

Mr. Chambers: You have got to find some method.

The Witness: But the assessment was levied against Block 989, Lot 1, and that is these two parcels. 37599

By Mr. Chambers:

Q. Block 1092, Lot 7, Parcel A, the $167.76.

A. Yes, sir, I am just looking that up now.

Mr. Chambers: You see, it does not affect the total down at the bottom, if the Court please.

The Master: You are wasting a lot of time on picayune stuff here, and time is too valuable.

Mr. Chambers: Will counsel concede that we should not include any assessments?

Mr. Ransom: No, it is an effort to whittle away a few dollars here and a few dollars there.

Mr. Chambers: It is not whittling away, we are giving you the benefit of the assessments.

The Master: At a tremendous expense in this case.

Mr. Chambers: How would you include the assessment? We have to take it the best we can. If somebody devises a better method, we will use that.

The Master: A lot of fancy theories in this
37601 case, when we are confronted with a very practical situation. This case is not going to be decided on theories.

The Witness: The assessment of $167.70 for Block 1092, Lot 7, Parcel A, March 27, 1895, it was assessed against Lot No. 225, which is now 1092, Wards 1 to 28, and the entire—

The Master: Wards 1 to 28?

The Witness: Yes, sir. They used to call it ward numbers, in the old days.

The Master: That was the whole city, 1 to 28.

The Witness: The ward numbers, as it appears
37602 on the assessment bills at that time is about the same thing as a lot number.

The Master: Not at all.

The Witness: That is the way the assessment bills check.

The Master: Not at all. You didn't know what you were talking about.

Mr. Chambers: Not so loud, if the Master please.

The Master: The witness don't know what he is talking about.

The Witness: Well, I can show you the assessments.

The Master: Well, don't show me, because I have handled assessments for 35 years, back to the old ward numbers.

Mr. Chambers: Yes, he does, he knows what it shows.

By the Master:

Q. Well, wards were distinct section of the City?

A. Well, the bills show no lot numbers, they show ward numbers, and I checked them up against the old numbers to that extent, and they correspond. 37604

Q. Well, then, it is the lot numbers?

A. It is a lot number, but they called them old ward numbers.

Q. Ward lot numbers, that is what they were called?

A. Well, it represents a lot number, but they called it a ward number.

Mr. O'Brien: You should distinguish it anyway.

Q. I know, but what ward were they in?

A. They were lot numbers of certain wards.

Q. Where was the property situated? I could probably guess the ward number?

Mr. O'Brien: I would not do any more guessing, your Honor. Let the witness tell you how he did it and identified the lot to prove that he is right. 37605

Q. Where is the property situated?

A. West 44th and West 45th Streets, Eleventh Avenue, West.

Q. Go ahead. In what year?

A. 1895.

The Master: Go ahead.

By Mr. Chambers:

Q. Go ahead, Mr. Silverman. Have you finished with 1092, Lot 7?

A. Yes, sir.

Q. Now, 1457, Lot 6, Parcels 1 and 2, will you explain that charge shown on Map 10 of that exhibit?

A. Why, the total amount of assessment against Block 1457, from 1891 to 1900, was $5,059.43; and 90 per cent of that was applied to Parcel 1, and 10 per cent was applied to Parcel 2, and the 10 per cent was $505.94.

Mr. Ransom: I object to that as purely—

Q. Did you do that on area?

A. Yes, that is approximate area.

37607 Mr. Ransom (continuing): As purely arbitrary. Just a minute. I am stating an objection. It is arbitrary and hypothetical and theoretical, no possible basis for doing any such thing, it is just simply a part of a plan of picayune whittling away, or cheese paring of the most microscopic character, for which there is no basis known to this witness or anybody else.

Mr. Chambers: This is not whittling away, it adds to, gives you something that you have not included yourself.

Mr. Ransom: First they have Hine when he was in the University of Wisconsin throw out
37608 these properties, and then they divide up assessments in some arbitrary way so as to load the assessments on the property that is thrown out.

The Master: But this is not the time to sum up.

Mr. Chambers: You better see a doctor this morning.

Mr. Ransom: Dr. Maltbie?

The Master: That is very poor humor. Go on.

Q. Could you tell what the assessment was on 1457?

The Master: He stated that.

Mr. Chambers: He did not tell you what kind of assessment it was, what it was for.

A. I think I could. I will just look that up.

The Master: Don't waste time on it. Go on to the next one.

Q. Block 1704, Lots 1 and 5, take 1704, Lot 1, Parcel 1.

The Master: I simply asked the other question as indicating how difficult it was to pro rata any portion of an assessment against part of a piece of property, because a larger part of it might 37610
have been pro rated against it.

Mr. Chambers: It is difficult, but if you have to do it, how would you do it?

The Master: It is not only difficult, but it is impossible for you or anybody else at this time to say that any one portion of an assessment was applicable to part of this property, because the assessor who fixed the assessment and levied it may have levied a greater or lesser part of it against the easterly end or the northerly end.

Mr. Chambers: But if you are selling off a parcel, and wanted to make the buyer pay his proportionate share of that assessment, you would 37611
have to do it. You would find some way to do it.

The Master: Yes, but the answer to that is that the practice in New York City, so far as I have known for 35 years, is not to have the buyer pay the assessment, the seller pays the assessments which are liens on his property, and the buyer has not got to worry about it. So we never try to pro rate assessments.

Mr. Chambers: Suppose they have, which is the case, a lot here divided into two parcels, one

of them is used and useful for gas purposes, and one parcel is not, and the assessment is on the whole lot, wouldn't you have to decide?

The Master: I don't know how it can be done.

Mr. O'Brien: We are trying to give a fair basis on which you may make an arbitrary decision in regard to this particular assessment. It won't be precise, it cannot be in the nature of conditions, but it will be the nearest approach that you can come to a readjustment.

The Master: Well, let us get the answer.

37613 Mr. O'Brien: Why, the whole operating journals of this company are made up of adjustments of that kind, jugglery you might call it.

The Master: Well, I notice by this morning's Times you have been trying this case again in the newspapers?

Mr. Chambers: Who?

The Master: Mr. O'Brien.

Mr. O'Brien: I do not see the application to what I am talking about.

The Master: About as much application as the statements in the newspapers this morning have to this case.

37614 Mr. Chambers: All right, Mr. Silverman?

The Witness: I will be ready in a minute.

The Master: The practice of trying cases in the newspapers ought to be condemned and should be regulated in some form by rule of the Court, or in some other manner. I think it is an outrage on the public to give out statements of that kind, and to my mind is contempt of the Court, although I have no power to act on it.

Mr. O'Brien: I have not heard you comment yet upon the complainant company's publicity bureau.

The Master: I have commented in the same fashion. I think this business of giving out statements is all rot.

Mr. O'Brien: You never mentioned the repeated articles the complainant company have put in the newspapers, the announcement made—

The Master: What I say applies to everybody in this case, Mr. O'Brien. If I have not said it before I say it now. This constant—

Mr. O'Brien: When I drew your attention the other day to the use that was being made by the complainant company of an isolated statement of 37616
the witness Little, you did not make any such comment. When I drew your attention to many other things that were done by Livingston, the publicity man of this company, you made no such comment.

The Master: This practice of having a statement in the New York Times every Monday morning from Mr. Burr or Mr. O'Brien, as to the facts in this case, is wrong, and is condemned by the Master.

Mr. O'Brien: I take exception to the statement that there is any statement in the New York Times every Monday morning from Mr. Burr or Mr. 37617
O'Brien.

The Master: Well, the record will show that the Master states that he noticed it in this morning's Time, and he noticed it in last Monday's Times.

The Witness: The total assessments charged Block 1704 from 1887 to 1894, and they were all the assessments charged in those years, during the period from 1884 to 1905, amounted to $8,032.76. The distribution of that amount to Parcels 1 and 2 was made on the following basis: It was based

on Senator Boylan's valuation for 1906, Parcel 1 was valued at $78,000, Parcel 2, at $93,000, and the balance at $114,000, making a total of $285,000. Of this total $78,000 is 27 per cent, $96,000, or Parcel 2, was 33 per cent. Parcel 1, therefore, was charged, that is of the total amount for assessments of $8,032.76, 27 per cent is shown against Parcel 1, amounting to $2,168.85, 33 per cent is shown against Parcel 2, amounting to $2,650.81.

37619 Mr. Ransom: I move to strike out the statement of the witness as to Senator Boylan's valuation. Senator Boylan made no valuation. Senator Boylan assumed a valuation given him by Mr. Chambers, and made an arithmetical computation, it was not a valuation at all.

The Master: Motion denied.

Mr. Ransom: Exception.

Q. Block 1704, Lot 5?

A. I just stated that as Parcel 2, said it was 33 per cent of the total amount, or $2,650.81.

Q. Now, Block 1909, Lot 1?

A. From 1884 to 1905?

Q. Yes.

37620 A. Of the total amount of the assessment against that particular block from 1884 to 1905, there was eliminated assessments applicable to any of the land that had been disposed of by the company, and the balance of $5,466.55 is the amount found to be applicable to Block 1909, Lot 1, as shown on Map 17 from 1884 to 1905.

Q. Now, Block 3236, please state how you apportioned that, Lot 1, Block 3236, shown on Sheet 19 of that exhibit of maps?

A. Block 3236, the total amount of assessments charged for 1913 to 1917, inclusive, that is cover-

ing the period 1909 to 1918, was $33,282.94. This amount was apportioned to the south 450 feet on the basis of Senator Boylan's valuation. The south 450 feet being valued at $64,000, the complete tract, or the whole tract, $200,000, therefore one-third was charged as applicable to the south 450 feet, or $11,094.31.

Q. Now, you prepared, did you, another table designated for convenience, Table 118?

A. Yes, sir.

Q. What does that table show?

A. That table shows assessments charged to certain 37622
lands 1906 to 1918, by years and parcels.

Q. Is it correct?

A. Yes, sir.

Q. Where did you get your information from for this assessment?

A. I got these assessments from the company's records, that is from an analysis of the company's real estate account from 1884 to 1905, real estate account from 1906 to 1908, improvements to real estate account from 1909 to 1918, and general structures improvements account from 1909 to 1918. In all of those accounts I found assessments charged to these particular parcels, and these particular assessments 37623
came from that source.

Q. Did you apportion some of this in the same way you apportioned the others on the other table, 117?

A. Well, Table 118 corresponds with Table 117, excepting that it shows the amount of the last two columns distributed by years.

Mr. Chambers: I offer Table 117 in evidence, also Table 118.

Mr. Ransom: I object on the ground already indicated about these statements. They are made

up in a hypothetical, arbitrary and theoretical way, in so far as they vary from the books, aside from typographical or mathematical errors, they are made up on the basis of arbitrary assumptions merely having the effect of charging an undue portion of the assessments made in these different years to the portions of the property which the Attorney General undertakes to exclude from the company's property account, hence they are made up on a basis so utterly misleading and theoretical that their receipt could serve no useful pur-
37625 pose.

The Master: Objection overruled.

Mr. Ransom: Exception.

Tables marked Defendants' Exhibits AA-427 and AA-428.

The Master: Cross-examination suspended.

Mr. Ransom: Are these all of the tables that Mr. Silverman is to put in in this case?

Mr. Chambers: All that I know of now.

The Master: Cross-examination suspended. Any more tables ready now?

37626

CLIFFORD H. PYLE, recalled.

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Pyle, for the convenience of the Court, have you prepared a table designated for convenience, Table 6, showing the assessment values or the valuations placed on all the property for 1906 to 1919 as testified to by the witnesses in this case?

A. Yes, sir, I have.

Q. And is the table correct, taken from the testimony?

A. The table is correct, taken from the testimony.

Mr. Chambers: I offer it in evidence. It is only a tabulated form for your Honor.

Mr. Ransom: Does he claim that all these figures are in the testimony?

The Master: Yes.

Mr. Chambers: Yes.

The Witness: In the testimony, or derived from the testimony?

The Master: What do you mean, derived?

The Witness: That is to say, in some instances— 37628

The Master: Where you have subdivided.

The Witness: They give the unit values, and I computed from the unit values given in the testimony what the whole would be.

The Master: For instance, what does that refer to?

The Witness: Take 987, for instance, Block 987, Lot 37, the testimony covered—Lot 37 included in certain prior years to 1918, other lots, and Lot 37 now is merged, that is the other lots are merged into Lot 37, so that the results would be the addition from the testimony of the lots which are now included in 37. 37629

Q. Were there any others, Mr. Pyle, that you remember, of that kind, so that you can tell the Court, aside from that one?

A. Yes, there were a few others, but offhand I do not remember just which ones they were.

Mr. Ransom: Well, this table relates only to a very limited part, about half, of the company's land shown on Exhibit 178.

The Master: That is another matter.

Mr. Ransom: That is out of nine million dollars—

The Master: I suppose it excludes 14th and 42nd Streets, does it?

Mr. Ransom: Out of nine million dollars of property used by the company, they have been kind enough to put in $4,000,000.

The Master: As I understand the witness's testimony, it is that these figures relate to the lots and parcels shown on them, and to no others.

The Witness: Yes, sir.

The Master: I will take them as a table showing the values placed upon these particular par-
37631 cels enumerated, and that is all.

Mr. Ransom: Your Honor declined to take my tabulation made up from the testimony on properties showing the quantum of investment and showing the valuations which we had proved by the testimony of different witnesses. I offered both of those tables, and neither of them were received.

The Master: Well, I took them anyway.

Mr. Ransom: You took them personally, but not in such way that they would go into the testimony, and what I object to is this going into the record so that it would have to be printed unless
37632 you likewise take mine.

The Master: I think that is correct, Mr. Chambers. I will either have to exclude this, or I will have to receive Mr. Ransom's tabulation for the same form.

Mr. Ransom: I will consent to this going in, if you will receive mine on the same basis.

The Master: I am going to be consistent about it. If Mr. Chambers wants to consent to these tables going in that you offered, merely for my information, I will take this; if not, I will

37633

take this the same as I took yours, for my information, without taking it as an exhibit.

Mr. Chambers: I don't remember what he has reference to.

The Master: Well, I remember there was one, and perhaps two tables, I remember one distinctly that you objected to, and I said, "Well, give it to me, and I will take it as a memorandum for my information," and I have got it. I looked at it Saturday as I was checking up some of these exhibits.

Mr. Ransom: Table showing—there were two tables, one some time ago, showing valuations 37634
which we had proved through the testimony of the tax appraisers, and through Mr. Carter's working capital, and through the testimony of the witnesses Mayer and Price.

The Master: I remember. I have got photostatic copies of those exhibits.

Mr. Ransom: Then there is a later one, you have got a photostatic form, which shows the various elements of property on the basis of the book costs.

The Master: Yes. I will do that, I will be consistent in both instances. At this time, having rejected a similar table for the information of the 37635
Master offered by complainant, I shall refuse to take this. If later on, counsel agree that all of the tables intended for information shall go in, I will take them all.

Mr. Chambers: Well, then, just mark it for identification.

The Master: Yes.

Mr. Ransom: No, you would not even mark mine for identification.

Mr. Chambers: Exception.

Mr. Ransom: If they are marked for identification—

The Master: It is identified on the record by the title of it. Just state what it is. Purporting to show what? How is it entitled?

Mr. Chambers: Assessed values of certain land without improvements, 1906 to 1919?

The Master: That is sufficiently identified.

By Mr. Chambers:

Q. Now, Table 7, you prepared Table 7?

A. Yes, sir.

37637 Q. And that was taken from the testimony in the case, was it?

A. It was.

Q. That shows the assessed valuation of certain land without improvements, 1906 to 1919?

A. It does.

Q. Designates the block, lot and map number as shown by this Exhibit AA-126?

A. Yes, sir.

Q. Is it correct as taken from the testimony?

A. It is.

Mr. Chambers: I offer that table in evidence.

The Master: I will make the same disposal of

37638 that table. I take it with this other simply for the convenience of the Court.

Mr. Chambers: That is all.

The Master: It can be put in in the shape of a memorandum, if necessary. I want copies of those, though, Mr. Chambers?

Mr. Chambers: Now?

The Master: Yes.

Mr. Chambers: That is all for Mr. Pyle.

The Master: Cross-examination suspended.

Mr. Ransom: There isn't any.

The Master: Any other tables ready?

37639

Mr. Chambers: The next thing I would like to call the Master's attention to the fact that we have not yet had the photostatic copies of pages 1 to 21 of the opening journal of the Consolidated Gas Company.

Mr. Ransom: It takes time to get those.

Mr. Chambers: And we would like to use them. You offered those in evidence on the 11th instant, and we have not seen them yet. Before we close up with our tables, we would like to have a look at it. You see, that was a new exhibit in this case.

37640

Mr. Ransom: The defendants have been using the books, and we have not been able to photostat it.

Mr. Chambers: What defendants?

Mr. Ransom: Well, I suppose—

Mr. Chambers: Where is the book?

The Master: If there is any information that you want upon which to base a table, go down to the gas company's office and go over the original and get it, or I will have the books brought right up here, either way.

Mr. Chambers: Will you have that book brought up here?

37641

The Master: Yes. Telephone down and have the book sent right up here.

Mr. Chambers: Also the underlying data.

Mr. Ransom: Mr. Silverman has been using that book.

The Master: All right, send for the book with those original sheets.

Mr. Ransom: It went up this morning.

The Master: Where, went up where?

Mr. Ransom: To be photostated.

The Master: Well, send for it and the underlying data.

37642 Mr. Chambers: I call the Master's attention now to what took place on pages 11433 and 11434 of the mimeograph copy of the stenographer's minutes as follows, when Mr. Little was on the stand:

"Mr. Chambers: Ask him who is to blame.

"The Master: Well, he was not saying.

"Mr. O'Brien: Well, he will say.

"Mr. Chambers: Will you ask him that?

"The Master: Not at this time.

"Mr. Chambers: Will you let me ask him?

"The Master: Not at this time. I will on re-
37643 direct; make a note of it."

Now, I ask that Mr. Little, in view of that statement, that I be permitted to call Mr. Little and ask him some questions on re-direct.

The Master: About that?

Mr. Chambers: About that, and about some other things.

The Master: No, not about some other things.

Mr. Chambers: Well, other things that you said—I haven't all the references, but you said I might have other things, as I remember it.

The Master: The stenographer will note that when Mr. Ransom's cross-examination of Mr.
37644 Little was completed, I directed that re-direct examination proceed. Every effort possible was made to delay that re-direct examination. When Mr. O'Brien announced that he was through with re-direct, I heard no request by any other counsel. I then asked Judge Ransom whether he had any further cross. He said, no. I thereupon excused the witness. After that had been done and Court had been adjourned, requests came in from various counsel for further opportunity to examine on re-direct. It appeared to the Master that

37645

there was a deliberate effort to delay the re-direct examination until after the recess hour on that day, and I therefore exercised my discretion and judgment in refusing to reopen the matter after it had been closed in the manner stated. In view of what Mr. Chambers has just said, I shall allow him to ask the witness Little about the item to which he has called my attention, and nothing else. Mr. Little, take the stand.

Mr. Chambers: Just a minute, if the Master please. You have not stated it quite as recorded in the stenographer's minutes.

37646

The Master: I don't care what the stenographer's minutes record. I give my recollection, which is clear and precise, and if the stenographer's minutes record anything that is apparently in conflict with what I said, my recollection will go.

Mr. Chambers: Now, that is where you have not stated it quite fully. When Mr. O'Brien—it appears on page 11616 of the minutes of February 13, 1920, Mr. O'Brien had been conducting the re-direct examination of Mr. Little.

The Master: Yes.

37647

Mr. Chambers: And I was in the room and I stood at the end of the table waiting for Mr. O'Brien to be through with the re-direct.

The Master: Yes.

Mr. Chambers: And he announced, practically, substantially, not quite—

The Master: Yes.

Mr. Chambers: As follows:

"Mr. O'Brien: I think I will rest here, your Honor. I will ask the privilege, if there are some matters that have to be cleared up, of recalling the witness."

The Master: Yes.

Mr. Chambers: "The Master: Have you any further cross?"

The Master: Addressing myself to Mr. Ransom?

Mr. Chambers: "Mr. Ransom: Is he through?"

The Master: Yes.

Mr. Chambers: "The Master: Have you any further cross?

"Mr. Ransom: No.

"The Master: Then re-direct is finished. Court
37649 is adjourned to two o'clock."

Now, then, as I say, I was at the end of the table.

The Master: How is that in conflict with anything I said?

Mr. Chambers: And I stood at the end of the table and I said I want to ask some questions on re-direct examination.

The Master: Yes.

Mr. Chambers: And you said the witness is excused and court adjourned.

The Master: Yes, after that you asked. Go on, Mr. Little.

37650 Mr. Chambers: Well, I want to ask him about working capital.

The Witness: Well, I will not let you.

Mr. Ransom: I object to any recalling of the witness.

Mr. Chambers: I take an exception. I do not see why counsel should be shut off in conducting a re-direct examination in that summary manner.

The Master: Do you want to ask him the question you have asked me to recall him for?

37651

Mr. O'Brien: Before your Honor proceeds, I want to have the record plain. You have made a statement that there was an effort made all during the morning to prolong that examination of the witness to the recess hour, over the recess hour, and on that account as on the other facts you narrated, that you exercised your discretion as you did. Mr. Chambers' request was made before the witness had left the stand, and when you were hastily moving toward the door to get your lunch. It was then after one o'clock and you ended up that whole proceeding with great speed. Now, I explained to you several 37652
times during the examination that morning that I had not had a chance to read over the minutes, there were some 225—at least 225 pages of the mimeograph record of the hearing of the day before, which had lasted from 9:30 until after 6 o'clock, one hour for recess, from 1 to 2, and I asked your Honor's permission to have a chance to go over that record that I might conduct the re-direct of the witness, and you declined to allow me to do it, except to the extent of examining it as I proceeded with the examination. Now, there was not an opportunity given that morning to prepare the examination of the witness. There 37653
was not an opportunity to go over the minutes, which are delivered here only at the opening of the court in the morning and having covered so much ground the day before, it was certainly a fair request for me to make, that I have that chance to prepare myself for the re-direct examination. You have referred to it, and that is the reason why I want to state the thing right for my part on the record now. I further assert that you did not, both in that instance and in the whole of the examination of the witness Little and the

presentation of the defendants' case, you have not accorded to us the same privileges that you gave to the complainant's counsel during the months and months that he was putting in his case.

The Master: Ask your question, Mr. Chambers.

Mr. O'Brien: And I take an exception to your Honor's ruling in the matter of the request of the defendant Attorney General, and I take exception to the statements of your Honor as made as to
37655 the record of Friday, February 13th.

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Archibald S. B. Little, recalled.

The Master: Proceed, Mr. Chambers.

Mr. Ransom: This recalling of Mr. Little is entirely over my objection?

The Master: Yes.

Mr. Ransom: Exception.

Re-direct examination by Mr. Chambers:

Q. Do you recall, Mr. Little—

Mr. Chambers: You mean you don't want us
37656 to have a fair chance?

The Master: Do you want to ask a question?

Mr. Chambers: I think I have a right to—

The Master: You have no right to go into a discussion with Judge Ransom.

Mr. Chambers: I submit we should have the right—

The Master: You have the floor to ask Mr. Little a question. If you do not want to ask him, I will take him off the stand.

Mr. Chambers: I submit we should be allowed to conduct re-direct examination of a witness

Q. Mr. Little, do you recall your being interrogated at pages 11433 and 11434, you were asked by the Master—"I am trying to get the witness to tell me if it is not a fact that if the public insist upon a maximum tremendous demand upon one or more days in the year, as against a much lesser pro rata increase in the annual sales, it does not necessarily mean that the gas has got to cost people more than it would if there was an equitable use of it"?

The Master: It should read, "Does it not," and "equable." I changed it, it is in my handwriting here. It should read, "Does it not necessarily mean." 37658

Mr. Chambers: Well, does it not necessarily mean that the gas has got to cost the people more than it would if there was an equable use of it?

The Master: In other words, if the demand was spread around equably.

Mr. O'Brien: I don't understand that equable.

The Master: I did not say equitable, I say equable.

Q. Do you remember that?

A. Yes, sir.

Q. And you said, "Who was to blame was not included in the question." Now, I ask you to explain what you had in mind there. 37659

Mr. Ransom: Objected to, immaterial

The Master: I will allow it.

Q. Do you care to see the minutes further?

A. I remember that distinctly enough.

The Master: I remember the witness indicated that there ought to be some effort made by the gas company to educate the people into the use of gas, that was his point at that time.

Mr. O'Brien: Oh, I don't know about that, your Honor.

The Witness: Well, I do, Mr. O'Brien.

Mr. O'Brien: I am going to protest against your paraphrasing the testimony of the witness and putting it to the witness before he is asked to answer his question.

The Master: Give what was in your mind, if I have not stated it correctly.

The Witness: What was in my mind at that time was that as shown by efforts made in other places to even up the load through winter and summer, that proper efforts should be made by
37661 the company to increase the sales of gas in the summer.

Q. And when you said you are not saying who was to blame, is that what you meant?

A. Yes, sir.

The Master: Do I understand you correctly to mean by that that you don't know whether the effort has been made and has not succeeded, or whether the blame is on the public for not using it more in the summer time, is that the idea?

Mr. Chambers: Just a minute, I object to that.

The Master: You don't want me to get the
37662 truth?

Mr. O'Brien: I object to cross-examination of the witness by the Master.

Mr. Chambers: Yes, I want to get the truth.

The Master: Put in your way.

Mr. Chambers: That is too much for me to swallow, that question.

The Master: Do I correctly understand you?

The Witness: Yes. Anything else I said would be based on hearsay.

The Master: You said yes, didn't you?

The Witness: Yes. Anything else I said would be based upon hearsay, which was in my mind at that time.

The Master: Proceed. That is precisely what I understood Mr. Little to say at that time.

Q. Now, have you made any study of the sales of this company, Consolidated Gas Company, so as to pass an opinion as to what amount is necessary for working capital?

The Master: I won't allow that.

Mr. Ransom: Objected to as incompetent.

The Master: Not proper re-direct at this time. 37664

Mr. Chambers: Well, I call him as my witness and ask him.

The Master: I won't let you call him now.

Mr. Chambers: I take an exception.

The Master: You can call him later on as your witness, if you want to call him as an expert for that purpose.

Mr. Chambers: No. I say I call him as a witness to ask him that question.

The Master: You do not claim it is re-direct?

Mr. Chambers: Yes, I do.

The Master: I won't allow it.

Mr. Chambers: I also claim I am entitled to do 37665
it in some way in a court of justice, I don't care what you brand it.

The Master: I will let you call Mr. Little as your witness now for the purpose of proving any fact which he was not called to prove before. Now, if you want to call him—

Mr. Chambers: Well, I claim that working capital question is cross-examination, because nothing was testified to by him on direct, and you and Judge Ransom brought it out.

The Master: What was it?

Mr. Chambers: And certainly I should not be, as representing a lot of people here, half a million, I should not be by any narrow ruling, shut out from showing that Mr. Little has not studied the question of working capital, and he will say so, to be frank with you. You and Ransom are now using what the witness said in relation to some other case, and saying he has now testified to the working capital. Now, I do not propose to allow the record to stand in the situation in which it is. I represent some people here entitled in a court of
37667 justice not to have an advantage taken of them in the manner in which I think it is being taken of us.

The Master: Hasn't he included working capital in his calculation?

Mr. Chambers: He has not, as I understand it, he made no study of it, and he will say so.

The Master: I will let you ask him that.

Q. Now, have you made any study of the working capital, so far as the Consolidated Gas Company is concerned?

A. No.

Q. Do you want to be understood as saying that
37668 you know what sum should be allowed for working capital in this case by the Consolidated Gas Company?

Mr. Ransom: Objected to.

The Master: I will allow it.

Mr. Ransom: Exception.

A. I don't know.

Q. Have you made any study of accounts receivable from 1906 to 1918, so far as they relate to this company?

A. No.

Q. Have you made any examination of the cash on hand by this company, and in its branch offices, so far as working capital is concerned?

A. No.

Q. Have you made any analysis of the amount due from the City of New York, and the dates of payment, so far as they relate to this company, in the light of working capital?

A. No.

Q. Have you made any analysis of materials and supplies account, so far as they relate to this company, 1906 to 1918, in the light of working capital?

A. You mean the Consolidated Company?

Q. Yes.

A. No. 37670

Q. From the time 1906 to 1919. Have you made any analysis or examination of the coal and oil consumed year by year, 1906 to 1919, by the Consolidated Gas Company, with reference to working capital?

A. No.

Q. Have you made any analysis of oil consumption, of the relation of oil on hand to the amount consumed by the Consolidated Gas Company so far as working capital is concerned?

A. Over the same years?

Q. Yes.

A. No, I have not.

Q. Have you made any analysis or examination of 37671
records of the company of coal on hand at various dates, 1906 to 1919, in the light of working capital?

Mr. Ransom: I object to these questions to this witness. He is showing he is almost as well qualified on working capital as Professor Maltbie.

The Master: Question allowed.

Mr. Ransom: Exception.

A. No.

Q. Have you made any analysis of the production expenses, separating labor from materials, so far as they relate to this complainant company, 1906 to 1919?

37672 Archibald S. B. Little, Re-direct.

A. Not over those full number of years, no.

Q. Have you made any analysis of the distribution, general and commercial expenses of the Consolidated Gas Company covering those same years, 1906 to 1919?

A. No.

Q. Have you made any examination of gas appliance rentals, including supplies, of the Consolidated Gas Company for 1906 to 1918, or 1919, inclusive?

A. No, I have not.

Q. Have you made any analysis of the relation of
37673 gas sales to accounts receivable covering 1906 to 1919 inclusive of this company, complainant company?

A. No.

Q. Have you made any examination of the accounts relating to refunds under the injunction proceedings of 1905, so far as they relate to this company.

A. I have made no analysis of them, no.

Q. And I will ask you this direct question: And you do not mean to be understood as suggesting or testifying to any amount which should be allowed the Consolidated Gas Company in this case as working capital for any time?

Mr. Ransom: Objected to.

37674 The Master: Objection overruled.

Mr. Ransom: Exception.

A. That is correct.

Q. Now, will you please explain what you had in mind when you testified in regard to working capital, on questions put by the Master and Mr. Ransom?

Mr. Ransom: Question objected to.

The Master: I will allow that.

A. I had in mind what I thought was fair at the time I put in my testimony in the People's Gas Company case in Chicago, as the excerpts from the transcript of the stenographer's notes in that case were read to me

by Judge Ransom, and I have no reason to change my opinion given at that time in reference to the People's Gas Light & Coke Company.

Q. Now, isn't it the fact that working capital is something that is peculiar to each company and each situation has to be studied by itself?

A. Positively, yes.

Q. That is, there can nobody reasonably fix an amount for working capital unless they have studied along the lines of these questions I have asked you?

A. Yes, sir, and others, yes.

Q. These analyses, some of them at least, and 37676
perhaps all of them, would have to be gone into?

A. I think so, yes.

Mr. Chambers: That is all.

The Master: Next witness?

Mr. Chambers: The Master will recall that complainant has presented some proofs here relating to the first eight months of the year 1919, and that so far as I understand, complainant's evidence has gone relating to the year 1919, the first eight months. Now, the Master made some comments some time or other during the trial of the case along the lines that you would not pay a great deal of attention, I do not pretend to quote 37677
your exact words, to the eight months part of a year.

Now, since complainant closed its case, they have presented, and I think these schedules were presented in January, recently anyway—

The Master: Let me interrupt you right there.

Mr. Ransom: January 20th.

The Master: The expressions that I made with reference to the part of the year did not have relation to what you are now referring to, it had relation to the net operating results for eight

37658

months because I indicated that charges were made before the books were finally closed for a year, but in so far as those eight months showed how much coal and oil was used, how much labor was used, how much it cost to produce gas, I will of course give a good deal of attention.

Mr. Chambers: Now, that is just it. We have been presented with some additional papers showing the expenses of operations and distribution and so forth for the whole year 1919. Now, I wish your Honor would make some ruling now so that we might be governed accordingly as to

37659 whether you are going to cover, before you close, whether you will allow complainant to reopen its case and present the remainder of the year 1919, or whether you will close the case with the eight months of 1919.

The Master: My present disposition is, and that is all I can say about it, that if the balance of the year 1919 is offered as rebuttal, and you object to it, that I shall probably have to sustain the objection as not being rebuttal. If an application is made to reopen the case, starting *de novo* practically, so as to permit proof of the entire year 1919, directed to the discretion of the Court, I

37660 am not prepared to say what I will do until I hear the other side. My present notion would be not to permit it, because I do not think it of sufficient importance in this case to start all over again and take another three or four months to try this case.

Mr. Ransom: With respect to many of the exhibits, these defendants have undertaken to bring conditions down to the present time. As to others they have not. The complainant renews now the notice which was given at the time on the 19th or 20th of January, that in connection

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with our rebuttal, whether your Honor deems it rebuttal or whether you deem it a reopening to that extent of the case, the complainant will ask leave to put in the operating figures for the year 1919. We do not believe that this case should go to a decision without that being before the court, in view of what was said by the defendant's counsel, and by your Honor's figures covering the conditions at the time of decision.

Mr. Chambers: Well, now, what exhibit? I would like to have you specify. You make such statements that are not borne out by the testimony. What exhibit in this case have the defendants put in that covers the whole of 1919?

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The Master: One minute, Mr. Chambers. You are getting into the habit again of arguing with Mr. Ransom, and not with the Court.

Mr. Chambers: Well, there is the danger of a little misstatement in his statement.

The Master: Well, it won't be very dangerous. The question as to whether I will permit the reopening of this case will have to come up after this case as it is now being tried is finished. It is not a matter to be discussed now.

Mr. O'Brien: The only thing is, it shows the defendants, or we have an inkling of what your Honor is going to do, the defendants would know just about what they ought to busy themselves about, it will help save some time.

37683

The Master: Judge Ransom handed you and other counsel some three or four weeks ago, a schedule prepared by Mr. Teele, I think it was, showing the result of operations for the entire year 1919. If I had been handed that as counsel for the defendants I should have made an investigation into that schedule and not take any chances as to what the Master will rule on it

37684

when it comes to it. Now, go ahead, Mr. Chambers.

Mr. Chambers: Well, we will be given an opportunity, of course, to meet the period from eight months on in 1919?

The Master: Of course if I let it in, but I won't at that time give you a month to look at that statement, when you have already had a month to do it.

Mr. Ransom: They had ten months, and they had a nominal year ended—

The Master: Yes, I know that nominal year.

37685 Mr. Ransom: October 31st?

The Master: But the answer is, if I open this case on the application of the complainant, I, of course, will permit the defendants to meet the proof that comes in, I will not give the defendants an opportunity to study a schedule that they have had a month to study.

Mr. Chambers: Well, I did not have that in mind, I had no intention of claiming an unreasonable period to do it in.

The Master: I would not give you any time, you should have looked at it.

Mr. O'Brien: Well, now, just you look at it.

37686 Let us get that right down to brass tacks, as they say—

The Master: Well, let us do it later on. Mr. Chambers next witness. I won't hear any discussion.

Mr. O'Brien: The case is in progress.

The Master: I won't hear any discussion of the case now.

Mr. O'Brien: Let me call your Honor's attention to just one thing when you expressed yourself as to what you were going to do with the eight months, and that when they came forward

37687

with that nominal year ending October 31, you will recall that you did not think much of it.

The Master: I do not yet.

Mr. O'Brien: Now, all those things would tend to lead the defendants into believing that you would not take in 1919.

The Master: You have no basis for any such belief, because the only statement I made was that the nominal year ending in the middle of the year does not prove the result of operations for a fiscal year, what it costs them to make during eight months, of course, I am going to consider and consider very seriously, too. Go ahead, Mr. 37688
Chambers.

Mr. Chambers: Will complainant's counsel cross-examine Mr. Mylott now and finish up with him so that he can get to work?

Mr. Ransom: If Mr. Mylott has any further exhibits to put in—is that the case?

Mr. Chambers: They are all in, as I understand it.

Mr. Ransom: I shall take up no time in cross-examination.

Mr. Chambers: Then Mr. Mylott is excused, cross-examination waived.

Mr. Ransom: There is none.

37689

Mr. Clark: Mr. Cohen is here.

Mr. Ransom: Has Mr. Cohen put in all his exhibits?

Mr. Clark: He is all through.

Mr. Ransom: I think we should have Mr. Maltbie.

The Master: No, if you are ready to cross-examine Mr. Cohen, go ahead and do it. If you are not ready I will not force you to. I understand there will be no more schedules offered by Mr. Cohen.

37690

Mr. Ransom: I guess Mr. Vilas can go ahead with Mr. Cohen.

The Master: Have you any more tables to put in, Mr. Clark?

Mr. Clark: Yes, I have.

The Master: When will they be ready?

Mr. Clark: One I think will be ready this afternoon, and the other probably tomorrow. I hope tomorrow.

The Master: Well, you know I have got to draw the line here.

Mr. Clark: Dr. Weber could not tell me ex-

37691 actly when it would be ready, whether it would be ready tomorrow or not.

The Master: What is the table that will not be ready today?

Mr. Clark: It is a table cutting down the operating expenses, showing our claims as to operating expenses, what they should be for all the years.

The Master: In other words, it is practically a table for information?

Mr. Clark: It is almost that.

The Master: Is it based on other evidence in the case?

37692 Mr. Clark: Yes, and on certain assumptions.

The Master: But mostly assumptions, I suppose?

Mr. Clark: Well, it is our claim.

Mr. Ransom: Dr. Weber is not the man to cut down our operating expenses.

Mr. Clark: He can make up a table.

Mr. Ransom: He might start in on his own department.

BENJAMIN COHEN, recalled:

CROSS-EXAMINATION BY MR. VILAS:

Q. Mr. Cohen, on page 11,633 of the mimeograph record of the minutes for February 13th, you testified that at the 42nd Street station in 1910, in the month of August, the operating ledger shows price adjustment of $1,497.65 on coal tar, and an apparent sale of $877.03, total, $2,374.68, which does not appear on the gas production statistics. Did you examine the journal entries in connection with this ledger entry that you refer to? 37694

A. I examined I believe, the journal entry on the $1,497.65, although I am not certain of that.

Q. You are not certain whether you examined the journal entry on the $877.03?

A. I am certain I did not.

Q. You are certain you did not?

A. Yes.

Q. I show you now the operating journal for 1910, folio 230, and call your attention to an entry entitled, "General Suspense, to Sundries." Will you read that entry, please? You find there the $1,497.65, do you not?

A. That is right. 37695

Q. Just read the entry into the record, please.

A. "General Suspense to Sundries, $14,470.60; to apply to the proper accounts an amount temporarily carried to the credit of the former account under the terms of our contract with the Barrett Manufacturing Company, dated July 1, 1910, for the sale by us to them of coal tar and ammoniacal liquor. The rates therein set forth were retroactive to January 1, 1909. By the settlement effected August 24, 1910, the Barrett Company paid us the above amount, representing a difference between the bills as computed under

the aforementioned contract, and as originally rendered and paid. General profit and loss, 65.96 per cent; residual and by-product revenue, 62.47 per cent; coal tar, 14th Street, 51.33 per cent, $1,579.50; 42nd Street, 48.67 per cent, $1,497.65; 37.53 per cent ammoniacal liquor; 14th Street, 53.28 per cent, $984.96; 42nd Street, 46.72 per cent, $863.69. The total to general profit and loss is $9,544.80, to residual and by-product revenue, $4,925.80."

Q. Do you remember examining that item of the ledger?

37697 A. I looked at it.

Q. And you found there that this item of $1,497.65 that you have referred to represented an adjustment on a retroactive higher price, did you not?

A. Yes, sir, a price adjustment.

Q. A price adjustment?

A. Yes, sir.

Q. You would not expect to find that in the statistical record, would you, a price adjustment which was made several months after the statistic sheets were made up?

A. I would expect to find any adjustment on any record which comes from the statistical report. It

37698 should be made on the statistical report itself, no matter whether it is retroactive or not.

Q. Is it your understanding that the statistical reports are the only source for entries in the operating journal on gas production expenses?

A. As far as materials for manufacture go, I was given to understand that the statistical reports were the source from which all entries were taken.

Q. By whom were you given to understand that?

A. Mr. Davidson told me the statistical reports were the underlying reports for the entries into the journals and ledgers for the entries affecting material on manufacture.

Q. Did he give you to understand that they were the sole source?

A. I don't remember his exact words, but the impression, as I recall now, that he gave me was that anything which went into the production account was to be found on the statistical reports.

Q. And it was your impression even that an adjustment price made late in the year, reflecting back over various months, would nevertheless be found on the statistical reports for the preceding months?

A. It should be found in the month affected or in the month it is made. 37700

Q. Do you know where the entries in the statistical reports are derived?

A. I don't get your question.

Q. From what sources are the entries in the statistical reports received?

A. I didn't go back to question any of the sources of the entries to the statistical reports.

Q. You don't know where they came from, then?

A. I would not say I don't know where they came from. As far as I am concerned in making up this table I did not attempt to find out where the records came from, I took them as being correct.

Q. But you do know where they come from? 37701

A. I presume they come from the records at the plant. I don't know, but I presume that.

Q. They come through the Engineering Department, don't they?

A. I don't know; that is where they should come from.

Q. You did not investigate the record of manufacture to see if they came from that source?

A. I saw the record of manufacture, but I could not tell which was the prior record, the record of manufacture or the statistical report. My impres-

sion is that the record of manufacture, being a final record in ink, it is probably the last record, the statistical reports probably being the first record.

Q. That is merely your surmise?

A. That is my surmise.

Q. But you would not expect to find material on the statistical report without it being first reported by the works?

A. No, it could not be.

Q. It could not be?

A. It could not be unless the materials were kept
37703 in such a way as no other stock records were kept, and the stock record itself could be kept on the statistical record.

Q. But if the price adjustment were made by the general office after the statistical reports and the reports from the works were turned in, you would not expect to find this price adjustment carried back into prior reports, would you?

A. I would not say that, but I will say this, that I would expect to find the price adjustments either in the reports for the month that the price adjustment is made, or in the month in which the price adjustment is made for, and I found no adjustment in either
37704 of those cases.

Q. But you did find that journal entry that I showed you?

A. I did find that journal entry, yes.

Q. And that journal entry fully explained the nature of that price adjustment, did it not?

A. That entry explains it, but there is no record on the statistical reports.

The Master: I think we have had enough of that.

Q. On page 11,634 of the mimeograph record you state that in 1910, at the 14th Street station, the op-

erating ledger has $880.82 for coal tar, and the gas production statistics, $894.81, a difference of $13.99. When you found this difference in the operating ledger from the statistical reports did you make any inquiry of anyone as to the reason for it?

A. I didn't make any inquiry, I didn't think I would have to. I dug it out myself, I simply went back to the books and traced the difference. I finally found where the difference existed.

Q. You did find where it existed?

A. Yes, I found where it existed all right, but I also found that the records underlying the entries 37706
show discrepancies for the difference.

Q. You found that the difference represented a credit to the Barrett Manufacturing Company on an adjustment of sales for preceding month, did you not?

A. I don't recall that at all.

Q. You don't recall what the reason was?

A. I don't recall what the reason was.

Q. Did you consult the sundry debtors' blotter to ascertain?

A. I didn't have to.

Q. Did you ascertain that a similar credit was made also for 42nd Street? 37707

A. I know a similar credit was made for 42nd Street.

Q. And according to your idea there was a similar discrepancy at 42nd Street?

A. Which I pointed out a little while ago.

Q. You simply made a note of this difference, but you were able, by consulting the records of the company, to ascertain the occasion for the difference, were you not?

A. I was able to get what the company considered the correct amount, in this way: I found—I as-

37708 Benjamin Cohen, Cross.

sumed, rather, that the operating ledger is the correct record after all adjustments are made. I assumed that if any differences existed between the operating ledger and any of the subsidiary records, the subsidiary records were probably wrong, and on that assumption I took the operating ledger for the figures.

Q. How can the subsidiary statistics be wrong and the operating ledger be right?

A. Because the subsidiary entries do not contain all the entries in that month which appear on the operating ledger. In other words, there are omissions
37709 or discrepancies between the operating ledger and the subsidiary entries. I will point them out to you.

Q. How does the amount get into the ledger?

A. The ledger for that particular item showed, 888082, and the gas production statistics showed, 889481. That is the difference I found.

Q. You found the difference in sundry debtors in the form of a credit, did you not?

A. I did not go back to the sundry debtors' blotter for that.

Q. You found it?

A. No, I simply found there was a difference between the two records, and I assumed the operating
37710 ledger to be the correct one.

The Master: That indicated to you that there was a credit somewhere?

The Witness: It did not indicate anything of the sort; there was an error.

The Master: Was there a credit?

Mr. Vilas: Yes.

The Master: Point it out.

Q. Mr. Cohen, you went back and ascertained for yourself, didn't you?

A. I say I ascertained the fact that the two did not agree; that is what I said.

The Master: Get the record.

Q. Now, on the same page—

The Master: We are wasting a lot of time on a difference of $12 or $13. It doesn't amount to anything, out of the millions and millions of entries in these books, covering a period from 1906 down, the few possible charges of errors rather confirms the accuracy of the books than otherwise.

Mr. Clark: Of course we have not been able to go through the millions and millions of items.

Mr. Chambers: I must except to that. 37712

Mr. O'Brien: I certainly will except to it and say this to your Honor. You apparently are assuming that where errors are pointed out they are the only errors in these books.

The Master: I should imagine that after three sets of defendants have had three sets of accountants on these books for months and months and months, that substantial errors, or charges of incorrect bookkeeping, would be subject to substantiation in a way that there would be no escape from.

Mr. Chambers: Pardon me, but three sets of defendants have not been on these books for 37713
months and months and months.

The Master: Haven't you had accountants on the books?

Mr. Chambers: Certain portions of them, relating to certain things.

The Master: Haven't you had accountants on the books?

Mr. Chambers: Not in the line in which you speak of it. The Public Service Commission has covered—

The Master: The Public Service Commission have had

Mr. Chambers: Not in the light in which you speak of it

The Master: And the District Attorney has had them.

Mr. Chambers: Not in the light in which you speak of it

The Master: Well, it all depends on what light you put on things.

Mr. O'Brien: Don't you understand that it
37715 is one thing to audit general books of account, and it is another thing to get into the underlying data.

The Master: You have had access to the underlying data.

Mr. O'Brien: No, we have not.

Mr. Chambers: We have been awfully busy with our case.

The Master: It is the fact that you have.

Mr. Clark: We have not had a chance to cross-examine the fellows who made the underlying entries.

The Master: I don't care a snap of my fingers
37716 who made the underlying entries.

Mr. O'Brien: I am going to show you how misleading they are by bringing here the manufacturing book for the 99th Street station and tell you what I have told you once before.

The Master: I don't want any more speeches.

Mr. O'Brien: That the books do not agree—

The Master: Ask your question.

Q. On the same page, Mr. Cohen, you said that in 1911 the gas production statistics show 37,067.52 tons of coal.

A. That should be loads.

Q. Well, loads of coal. You said the record of manufacture has 37,073. That the difference is in the month of June, where the record of manufacture shows 2,896 tons, as against 2,890.52 in the gas production statistics. I show you the gas production statistics for June, 1911, 14th Street station, and ask you to point out where this amount of 2,890.52 is shown thereon?

A. Here it is (indicating).

The Master: The witness points to an item under the heading, "Loads" and opposite the line "Produced," 2,890.52. 37718

The Witness: I would like to have the record of manufacture to show the other item.

Q. You testified, according to the record, that it was coal.

A. Well, all throughout these statistics coke and screenings are not separated.

Q. You spoke of coal.

A. Well, if you will read a little further you will see that the item was coke.

Q. You testified to it as coal. I show you the first page of this report, under the item "Coal," and ask you if you do not find the figures 2,896?

A. I did not testify as to that at all. 37719

Mr. Vilas: I call the attention of the Master to the minutes, in which he refers to coal, 2,896 tons.

The Witness: I corrected it, too.

The Master: He says it is coke now, and it is 2,890.52.

Q. On page 11,635 of the record, you testified that in 1909 the gas production statistics show 61,334,500 pounds of coke produced, and that the record of manufacture shows 61,354,000, a difference of 19,500 pounds, which amount is made up by differences during the months of January, February and March.

A. Yes, sir.

Q. These differences you found in January, February and March, did you not?

A. Yes.

Q. The statistical report and record of manufacture report coke in terms of loads and not pounds, do they not?

A. The statistical reports have it both ways. The record of manufacture reports them in loads, and we always figure them back to get the actual pounds.

Q. You multiplied the loads by 1,500 pounds?

37721 A. 1,500 pounds per load of coke, and 2,000 pounds per load of screenings.

Q. I show you the statistics for the 14th Street station, January, 1909. Please indicate the total loads of coke produced?

A. 3,376 loads.

Q. Now, I point to a foot note in the blank space in the lower left-hand corner of that page, and I ask you to read it.

A. I saw that "Produced as above 3,376." It does not show whether loads or money. "Add for (not charged for) fire clay at 14th Street, 9; actually produced 3,385."

37722 Q. This note indicates that 9 loads were used for drying fire clay at 14th Street?

A. Yes, sir.

Q. And the amount actually produced was 3,385 loads?

A. Yes.

The Master: I understood you to say you saw that note when you looked at the statistical record?

The Witness: Yes, sir; I did.

Q. Look at the record of manufacture for the corresponding period. You find on the block showing

the use made of the coke, used in drying fire clay at the mills, 9 loads?

A. Yes, sir.

Q. And amount produced, loads, 3,385?

A. That is right. I want to explain the difference in spite of that.

Q. Just wait a minute.

A. Well, I want to explain the difference.

The Master: Just answer questions.

Q. Now, you notice a similar corresponding item for February and March, each, two loads, of coke, do you not? 37724

A. Yes, sir.

Q. Making a total of 13 loads?

A. 13 loads.

Q. And that 13 loads multiplied by 1,500 to reduce it to pounds, produces 19,500 pounds?

A. Yes, sir.

Q. Just the amount of the descrepancy you pointed out?

A. That is right.

Q. As a matter of fact isn't this discrepancy simply a matter of the method of keeping the records?

A. No, it is an error.

Q. An error, is it? In what respect is it an error? 37725

A. If you will take the gas production statistics you will find that the 13 loads were never taken in to the production of the coke, as far as the money goes, and, as I said before, the basis I used for all these records were the operating ledgers. Since the money was never taken in, I assumed that the coke was excluded on the same basis.

Q. Did you think of any reason why it was excluded?

A. I didn't know anything about why it was excluded.

37726 Benjamin Cohen, Cross.

Q. Do you know how the Commission requires the Company to report the use of residuals which it uses itself?

A. Yes.

Q. How?

A. They are required to account for it in the account, "Duplicate Gas Charges."

Q. They are required to be credited to gas production?

A. They are required to show the entire production, and to credit the production account with the
37727 same amount.

Q. Suppose the same amount is not used in the production of gas?

A. Let me point out to you on the same sheet that coke used in other places in the drying of fire clay was treated in exactly the opposite manner. That is, the production was taken into the account. This is the only item omitted. Why it was omitted, I don't know.

Q. If you made use of coke for purposes which are capital expenses and not operating expenses how could you credit it to operating expenses?

A. You would not credit it to operating expenses,
37728 that is, you would credit the operating expenses through the account, "Duplicate Gas Charges," and charge the capital expense.

Q. "Duplicate Gas Charges" is not a capital account, is it?

A. I didn't say that, I said you would charge the capital account and credit it to duplicate gas charges, which will result in a credit to the expenses.

Q. In other words, you set it up in the capital account and credit operating expense?

A. That is the idea.

Q. On the same page you testified that at the 21st Street station in 1909, the coal tar used in March,

37729

according to the Operating Ledger, was $4,473.87, while the gas production statistics show no money value for the tar used whatever. Do you know through what source this amount appears in the Operating Ledger?

A. I could not find the source, but the source from which every entry during that year in every month appears in the Operating Ledger is the gas production statistics, and I did not find this entry in the gas production statistics in that month. The assumption I made then is that it is an error of omission.

37730

Q. Do you not consider the Operating Journal a legitimate source for posting this amount to the ledger?

A. The Operating Journal is not the source for that entry. It is simply a medium for transmitting the entry from gas production statistics to the ledger.

Q. May it not be a medium for transmitting the entry from some other source than gas production statistics?

A. It might.

Q. Does the fact that this amount does not appear in the statisical statement have any effect on the books of account?

37731

A. In my opinion it does, yes.

Q. What effect?

A. The effect that there is an omission on the gas production statistics which cannot be explained, as far as I can see.

Q. Look at the gas production statistics for 44th Street and 99th Street for the same month. Do you find on these statements the money value for tar used?

A. At 44th Street and 99th Street, I do not find that, but I did not state that those were the only cases. I only took typical cases, and did not attempt to give

you all the errors that I found. My claim is that this will be the same as the one on 21st Street.

Q. Although you stated on page 11,637 of the record, "Those are all that I noted"?

A. Meaning that I made note of.

Q. You state on the same page, page 11,635 that you examined Journal Entry No. 1058 for 1916, and you quoted that item, "Debit drip oil, to residual and by-product revenue," and stated that the gas production statistics showed no quanity produced during that month.

37733 A. What station is that?

Q. That is 99th Street.

Q. Do you mean by that that drip oil was debited and residual and by-product revenue credited?

A. I think the word "debit"—drip oil was deducted—I read off the entry from the book. I shall have to see the entry from the journal to be able to repeat it.

Q. I show you the November Gas Production Statistics for 99th Street station in that year. It appears therein, does it not, that 17,644 gallons of drip oil were sold at a price of 14 1/2 cents a gallon?

A. It shows the sale of 17,644 gallons.

37734 Q. And you also find, do you not, on the line showing amount on hand, two items, one of 17,644, and one of 5,947?

A. That is right.

Q. Is that correct?

A. Yes.

Q. Now, look at the gas production statistics for the preceding month. Do you find there the same amounts, 17,644 and 5,947, carried at the rate of 21 2 cents?

A. That is correct.

Q. It would appear therefore, would it not, that the 17,644 gallons which were sold in November were actually produced in October?

A. I cannot get that conclusion.

The Master: Does not one report show that it was produced and the other one show it was sold?

The Witness: I stated that in the month of November I saw no amount for drip oil produced in the month of November.

The Master: Well, on this October sheet, in lead pencil is written in the word "Sold," isn't it? 37736

The Witness: Yes, sold.

The Master: Sold, 17,644?

The Witness: That is right.

The Master: And bracketed with it the credit item, "On hand, 5,947"?

The Witness: Tha is right.

Q. Those items are totalled and carried forward to the next month.

The Master: Now, on the November sheet there is?

The Witness: On hand, the same quantity.

The Master: The item of 17,644, and 5,947?

The Witness: Are shown on hand there. 37737

The Master: They are brought forward as on hand?

Q. And below 17,644 shown as sold for 14 1 2 cents?

The Master: Well, the item sold appears on both.

Mr. Vilas: You get it in the next month.

The Witness: That simply shows that they are both wrong apparently.

Q. Page 11,636 of the record you stated that, "in March, 1915 the gas production statistics show 35,570

gallons of drip oil as apparently used. On reference to the journal and ledger I found that it was not used but was sold." Take the statistical statement for the month in question and point out to me where it appears that the amount was used?

A. May I ask you to repeat my reading off on that?

Q. I read from the minutes at page 11,636: "In March, 1915, the gas production statistics show 35,570 gallons of drip oil as apparently used. On reference to the journal and ledger I found that it was not used
377739 but was sold."

A. I assume that this item was in the absence of any entry here, to be against the item above.

The Master: The answer to it is that the line above it is printed, has a title, "Used."

The Witness: That is correct.

The Master: The line below that has no title printed or otherwise.

The Witness: Correct.

The Master: And the figure you have just referred to is on the line upon which the title is blank.

The Witness: Yes, sir.

377740 The Master: And you have assumed that it belongs to the upper line?

The Witness: Yes, sir, there is nothing to indicate what it is. I might state that the item "Received" in all these statistics was never crossed out to indicate whether the item was really received or whether it was really produced.

Mr. Vilas: We will get to that in a minute.

Q. You found this item "Received" in all the blanks printed, in many of them crossed out?

A. I found in most years the "Received" was crossed out and the word "produced" wherever it applied properly substituted, but in very many cases you could not tell by reference to the statistics whether the item was "Received" or "Produced."

Q. You mean you could not tell?

A. Nobody who didn't know the actual physical facts connected with the oil.

Q. You testified on the same page of the record, that at 42nd Street, in 1909, month of November, the gas production statistics has no money value for tar sold, while the operating ledger shows $712.36? 37742

A. What year is that?

Q. 1909, 42nd Street. If you assumed that this amount was not in the statistical statement, how did you assume that the entry could be posted in the ledger?

A. Well, the entry is posted into the ledger, is my recollection, as a sundry debtor item, and the only way you can have a debtor is by a sale. All these sales go to the sundry debtors' blotter.

Q. Did you investigate to see from what source this entry in the ledger appeared?

A. I don't remember now whether I did or not.

Q. You don't remember whether you did or not? 37743

A. No.

Q. Is it not a fact that on these particular statistical sheets no stock account was kept on the statistical sheets, that is, no financial figures were kept on the statistical sheets?

A. I would not say that at all.

Q. I show you the statistical sheets. What do you say now?

A. That is on tar.

Q. They don't keep a stock account of dollars on that sheet, do they?

37743 Benjamin Cohen, Cross.

A. I see the $712.36 here.

Q. That is the $712.36 you said didn't appear, isn't it? It is here.

Mr. Chambers: Just a minute.

A. Now, just a moment there.

Mr. Chambers: Just don't be hasty.

Mr. Vilas: I am not in any hurry.

A. You are referring to the wrong $712.36. The $712.36 I had in mind was the credit for the residual which was made on the basis of sale, not on the basis of receipt. There is no credit to residual made in 1909
37745 on the basis of any receipt. It is all on the basis o sale.

Q. Well, you see the amount $712.36 there, don't you?

A. It is not where I said it was missing, and if it coincided with the ledger it should be opposite the amount sold, where it is not given here.

Q. Were you misled by that entry?

A. I would not say I was misled, I would simply say that the two records do not agree.

Q. You also testified on the same page that in 1910 at 14th Street, the gas production statistics, which sometimes show the journal entry on the face
37746 of them, in that year shows a journal entry as follows. Debit duplicate gas charges—

A. That should be credit.

Q. All right, change it to credit duplicate gas charges for $2,473.05, and credit residual by-product revenue for $4,991.92. Look at the statistical statement and see if you have correctly quoted the journal entry referred to?

A. The credit to duplicate gas charges is $2,473.05. The credit to residuals and by-product revenue is $4,991.92, as I have here.

Q. What about the debit? You don't read the balancing item.

A. I was not interested in that at all.

Q. I am. Will you please read it.

A. The total amount is debited to coke $7,464.77, but does not affect the fact that the other two items were reversed

Q. What possible difference in the final financial statement of the company's account does the reversal of these items cause, assuming that they are reversed?

A. The difference is this, that the coke was misrepresented by $2,518.87, on account of that reversal of the entry. 37748

Q. But the total residuals was not changed in any way, was it?

A. I didn't say it was.

Q. The total of the two items?

A. I didn't say it was.

Q. On the same page you testified that at the 14th Street station for 1918 the gas production statistics show residuals received instead of showing residuals produced. That is the item of the printed blank to which you have already referred, is it not?

A. That is general throughout a good many years, and very misleading to anybody that tries to make up any data from it. 37749

Q. You don't mean to state that all of these statistical sheets for 1918 show "Received" instead of "Produced," do you?

A. Not to my recollection, no.

Q. Look at February. Is the change made there?

A. In February the change is made, yes.

Q. Do you wish the Court to infer that you, as an accountant, were misled by the failure to strike out that word "Received" on every one of these reports?

A. I would not say that I was misled, but I did find this: In some years this company bought some

residuals. I do not recall what it was, from the New Amsterdam or the Standard, and in view of that anybody who takes off any figures from the records would have to be very careful not to get mixed up in the amount bought from other companies as against the amount used by the Consolidated Gas Company itself.

Q. What residuals did you find that the company bought?

A. I don't recall the item.

Q. Do you recall any instance?

37751 A. I will not be certain; but I believe it is a purchase of drip oil from the New Amsterdam Company.

Q. Have you any note of it at all?

A. No, I did not make any note of it, I simply bore it in mind.

Q. You were not misled by the situation in examining these sheets, were you?

A. I just covered that question fully in the answer before. It might be in 1912 or 1913, that the Gas Company bought that if I recall right, but I won't be certain as to the date.

Q. Now, look at all the statistical reports for that 37752 year. In how many of the months do you find that residuals were received?

The Master: That is, if you find that the printed item is not crossed out.

Mr. Vilas: No, I want to know how many months additional entries are shown on there.

A. Well, here is one with no quantities opposite. Naturally you would not want to take that into account.

Q. And you would not expect it to show that?

A. No.

Q. How many do you find not crossed off?

A. Only two thus far. This may have been a very good year.

Q. Have you examined them all now?

A. I find three months here.

Q. Three months of the 12 in which there are entries?

A. In which the "Received" was not crossed out.

The Master: In any of these months was there any evidence of any produced?

The Witness: In those three months there was something produced every month.

Q. And in the other 9 months of the year you do 37754
not find anything produced, do you?

A. In the other nine months of the year, I don't remember now.

Q. That is what I asked you to look for. Look through them.

A. There was production in 5 months of the 12.

Q. And in the other months you find that th carried the same amount through from month to month, didn't you?

A. I don't get your question.

Q. Don't you find that under the heading, "Coal Tar"—

The Master: Drip oil we are talking about. 37755

Mr. Vilas: He is talking about residuals.

The Witness: What affects one will affect the other.

Q. You find that for the other months the item carried here, "Coal Tar, 1,431 gallons on hand," both at the beginning and end of the month, is that right?

A. That is correct.

Q. For every month for the last 7 months of the year, is that correct?

A. No, it is not correct. For the month of December, I believe that that is different. I haven't the money amount for the month of December—

37756 Benjamin Cohen, Cross.

Q. In the month of December do you not find that they disposed of the entire quantity on hand and closed out the account?

A. At the end of the month, yes.

Q. Now, you also find, do you not, in these statistics, in the portion relating to residuals, that the words "Coal Tar" and "Ammoniacal Liquor," and "Equivalent Pounds of Sulphate" are written in in pencil at the heads of the various columns?

A. Yes, as I recall a great many of them are written in that way. I will not say all.

37757 Q. They are changed in pencil?

A. Yes.

Q. So that the blank was not printed with the names of the various substances which were referred to later on in the reports, is that right?

A. That is correct. I might add that there was no omission of any headings, as far as I can recall, of any of those residuals however.

Q. Now, have you made all the corrections you want to make in Exhibit AA-200, 44th Street station schedules?

A. I have.

Q. This was prepared partly by you and partly
37758 by your assistants? A. Why, something of that sort.

Q. How many assistants did you have in getting up this?

A. No particular number. At times we had more people working on it than at other times.

Q. To what extent did you do the checking on all these exhibits, 26A and so on?

A. Why, wherever I found the possibility of a cross check I applied it. In some cases I did the detailed checking. As far as any particular sheet goes, I don't recollect just exactly which I did check, and just what I checked on any particular sheet.

Q. Do you mean by that that you made a check personally of every sheet, some check?

A. Oh, yes.

Q. Every sheet on the exhibit?

A. For instance, I checked the fact that the total cost, net cost, showing at the end, agreed with the operating ledger figure in the gas production account, less the residuals produced as shown by "Duplicate gas charges," and the residual and by-product revenue reduced by the expenses for residuals.

Q. Are the figures shown in these various columns headed "Quantity," "Unit price," "Cost materials per 37760
thousand cubic feet made," "Cost per thousand cubic feet made," all taken from the company's books?

A. Naturally the company's operating ledgers do not have any ratios like materials, per thousand cubic feet made, or cost per thousand cubic feet made. Those were computed.

Q. Those you computed?

A. Those were computed in the office.

Q. Were they computed by you or did you check them?

A. They were not computed by me personally, nor did I check them except in a general way to see how they lined up against the quantities. 37761

Q. Your table purports to be a statement of the cost of producing gas at the 44th Street station during those years according to the books of the company, is that right?

A. Yes, plus the ratios per thousand cubic feet made, and—

Q. In addition to what the books show you show—

A. All except the last two columns that you say is true.

Q. From what source—take 1906 for the 44th Street station—from what source did you derive the

figures showing the amount used and charged for water?

A. I assume that water is taken from the operating ledger.

Q. And the quantity of water shown in this particular instance is 3,851,900 cubic feet, multiplied by a unit price shown in the cost column as 1, supposed to equal the cost shown in the cost column?

A. No, that is wrong.

Q. It does not in this case?

A. I didn't say it did. Your assumption is wrong.

37763 Q. My assumption is wrong?

A. It is, you have got it just the other way. I took the quantity from the record of manufacture; I took the money from the operating ledger. I divided the quantity into the money to obtain the unit price.

Q. Well, if you divide a quantity into the money and obtain the unit price, the figures ought to prove the other way, oughtn't they?

A. Why, yes.

Q. And you have 3,851,900 cubic feet at a rate of 1 cent, and the amount of dollars is $3,835.60?

A. Yes, it looks as though it is about one one-

37764 thousandths of a cent different, or something of that sort, which was probably thrown off by the person making the ratio as to small to bother about.

Q. If the multiplication is carried across, it produces $3,851.90 against your $3,835.60, doesn't it?

A. I just told you these figures were obtained by multiplication. The positive figures are the quantity and the amount of money. There is no multiplication whatever on this table. The unit price is a derived figure.

Q. If you derive a figure by division of one figure

into another, the result ought to prove by multiplication, shouldn't it?

A. As near as you can in decimals, unless you carry them out into a long string.

Q. How many decimals did you throw away to get one cent per thousand cubic feet here?

A. I don't know, it looks to me very small though.

Q. It makes a difference of some $16, doesn't it, in the amount?

The Master: Let us get to the next item.

Q. You know, do you not, that the rate in New York City for water has been $1 per thousand cubic 37766
feet for years?

A. I don't know any such thing.

Q. You don't know that?

A. I don't know that.

Q. Do not the printed statistical sheets of the company show the dollar rate year after year?

A. I paid no attention on these sheets to anything I didn't use.

Q. You paid no attention to the rates paid for water?

A. I paid no attention to the rate paid for water. As I told you, I took the total quantity from the report of manufacture, and the money from the 37767
operating ledger. That was the quickest way and the most accurate way of getting it.

Q. And you produced a rate?

The Master: What do you show per thousand cubic feet?

Mr. Vilas: He shows a different amount on every page.

The Witness: $1.

Q. It shows $1 on this page, and $1.11 on the next page.

37768 Benjamin Cohen, Cross.

A. That same difference you will find in your own records.

Q. Do you know where the water report in the record of manufacture is obtained?

A. I don't know where it is obtained, but I presume it is a total of twelve months on the statistical report, which I assumed was correct, and did not go back to check. In other words, instead of adding up twelve months from the statistical reports, as these things had to be gotten out within a short time, I took that total which appears in the record of
37769 manufacture, and put it here to show the quantity.

Q. Then you did not take the statistical reports and the information contained on them for this item of water?

A. No.

Q. You disregarded that?

A. I didn't do that.

Q. Then in the 1907 statistics you show a rate of $1.11 per thousand cubic feet for water and that computation, if you multiply across, does not produce the dollars shown in the last column?

A. It was not multiplied, it was obtained by division.

37770 Q. And you still state that there are differences of $15 to $20?

A. That is correct.

Q. The difference is because division was used and not multiplication?

A. I didn't say that. I do say this—I can see your point. It is this: The report of manufacture in a good many years, as I said when I first put these statistics in, throughout the various years, is made up in ink, but there is one item which appears to be adjusted in pencil right next to it. When the ad-

justment was made I don't know, and which of these particular items is correct, whether the adjusted figure is correct, or the other, I don't know either, and I had no time to inquire into anything. Perhaps if I had inquired I might not have learned anyway why the adjustment was made, judging by some of the answers we got on some of the other things I am not sure we would have gotten the answer.

Q. You didn't inquire?

A. I don't recall inquiring. It may be that some of the people who worked on this thing may have inquired. I don't say whether they did or not, but I 37772
do know that our adjustments on the record of manufacture in pencil against the ink figures account for all these differences that you are pointing out now.

The Master: We are wasting entirely too much time on this, and the witness is making entirely too many speeches. Ask your questions directly, and don't ask unnecessary questions.

Q. Why didn't you take the water from the statistical report if you believed, as you have already testified, that everything ought to come from the statistical reports?

A. I don't believe I testified to that.

The Master: Why didn't you take it from the 37773
statistical reports?

The Witness: Because it is much quicker to take one item for the year instead of taking twelve items.

Mr. Vilas: There are a number of items, no two of them alike, all the way through.

Mr. O'Brien: I object to counsel testifying. He has got the Ransom habit.

Mr. Vilas: Well, I will stop and go over it all.

The Master: Next question.

37774 Benjamin Cohen, Cross.

Q. Take the item of water for 1916, you show 653,500 cubic feet of water at the rate of two cents per thousand cubic feet, amount $16.10, and the amount of materials per thousand cubic feet made is 77,770 cubic feet of water per thousand cubic feet of gas made. You made that computation, did you?

A. I didn't make it, but it was made in conjunction with this work.

Q. Did you examine that particular figure itself?

A. I saw it.

Q. Didn't it strike you as rather an extraordinary
37775 quantity of water per thousand cubic feet for a coal gas plant?

A. I don't know enough about the manufacture of gas to answer that question.

Q. That didn't strike your attention as peculiar?

The Master: He said so.

The Witness: I might say—

The Master: Don't say anything, there is too much being said.

Q. I show you the gas production statistics for December, 1916, 14th Street station, and call your attention to the last sheet there. I ask you to read what it says about water (handing witness).

37776 A. Where is it?

Q. I call your attention to a footnote in connection with the statement for water. What does the footnote say?

A. Before answering this question I would want to call your attention—

Q. I would like you to answer my question, please.

Mr. Clark: He did not use these things.

A. I was just going to say I have never used these things.

Q. You have already said that. Now, please read what it says there.

A. Shall I answer the question?

The Master: Answer the question.

The Witness: Gas production charged with 16,100 cubic feet, station distribution 114,900 cubic feet, $114.90.

Q. What is the amount after the 16,100 feet?

A. $16.10.

Q. That indicates, does it not, that only a portion of the water purchased during that year was charged to gas production?

A. I don't know whether—well, I presume that is the indication. 37778

Q. You took the entire amount of water charged to that station during that year, did you not?

A. I took the entire amount charged to that station for production shown by the record of manufacture.

Q. You took the amount of $16.10 and made these computations by which you arrived at a rate of two cents per thousand cubic feet of water; is that right?

A. That is right.

The Master: That is apparent on its face, what they did.

Mr. Vilas: I think I won't consume the time by developing all these water items. 37779

Mr. Clark: If he has a lot of things, let him pull them out and take them up. We welcome inquiry.

The Master: I can analyze these items myself.

Mr. Clark: I object to his testifying that he has a lot of things that he does not want to take the time to develop.

Mr. Vilas: It is quite apparent from what has been developed what the errors are.

The Master: If counsel points them out I can easily see them.

Mr. Clark: There have not been any errors yet.

Q. Taking 14th Street for 1906, I notice an item of spent oxide sold, carried in the column of residuals. The amount in dollars is $1,802.76. That goes to make up total residuals, from which you deduct residual expense, arriving at a net credit, and by deducting this net credit from the cost of caking coal you arrive at an amount which you call net cost
37781 of coal carbonized. I state it correctly, do I not?

A. Yes, that is apparently right.

Q. Do you understand that spent oxide has anything to do with coal, the carbonization of coal?

A. I don't know anything about manufacturing gas.

Q. You do not know what spent oxide is used for, do you?

A. I do not know the first thing about spent oxide.

Q. You do not know what oxide is used for?

A. I do not.

Q. You do not know that oxide is used in the purification of gas after it leaves the retorts, do you?

37782 Mr. Clark: He has already said he does not know anything about it.

A. I do not know the first thing about oxide.

Q. So, if it is a fact that oxide is something that has no connection with coal whatsoever, it should not be included in a statement of residuals that reduced the statement of coal carbonized; is that right?

A. No, it is not right, for the simple reason that I followed the record of the company itself, in which they treat the residuals in the same way that I treat them here.

Q. Where has the company treated residuals and made a statement of net cost of coal carbonized in which it included a credit for spent oxide?

A. Well, as I said before, I believe that the monthly reports take the residuals, as far as I could see, and deduct them right from the same figures that I deduct them here.

Q. And do they deduct them in exactly the same way?

A. I do not get your point.

Q. Do they include spent oxide as a residual credit applicable to the cost of coal? 37784

A. I don't remember in this particular case. But I do know that they take the residuals off the coal used.

The Master: The residuals, certainly.

The Witness: Not any particular item.

Q. You do not know whether spent oxide is a residual or not, do you?

A. The company credits that—

Q. Won't you answer my question?

The Master: Answer the question. Do you know whether spent oxide is a residual?

A. I do not know about spent oxide, and further—

Mr. Chambers: I object to that. Why should 37785 Mr. Cohen be asked questions like that?

Mr. Vilas: Because he has attempted to set up a statement of accounts of what he concludes to be residuals.

The Master: Have you answered the question? Do you know whether spent oxide is a residual?

The Witness: Presumably it is a residual.

The Master: All right, that is an answer. You understood it so?

The Witness: I arrived at my conclusion from the fact—

The Master: No, I did not ask you that.

Q. You assumed it was residual?

A. I did.

Q. A by-product of the coal?

A. Yes, it is shown here so.

Q. And you have assumed that throughout your tables relating to coal gas manufacture; where you find spent oxide it appears that they credit it to coal does it not?

37787 A. Right.

Q. Take 1911, the same Exhibit AA-39. You have an item "Total Cost of Gas Fuel, $44,421.45"?

A. Where is that?

Q. Do you find that?

A. What section is that?

Q. 14th Street, 1911.

A. What amount have you got there?

Q. $44,421.45?

A. Oh, yes, that is correct.

Q. That is made up of the four preceding items, immediately preceding it, entitled "Bench Fuel" and the four subdivisions of that are Coke, Boiler Fuel, and under Boiler Fuel, Coal and Coke?

37788 A. That is right, and Handling.

Q. And Handling Boiler Fuel. The total which you show for total coal gas fuel includes those items and also the total of $24,234.81 immediately above, carried as the net cost of coal carbonized, does it not?

A. That is correct.

Q. So that you have made a statement here that the total coal gas fuel cost forty-four thousand odd, when as a matter of fact that total includes also the cost of coal carbonized?

A. I included those amounts here, the same as they are included on those monthly reports.

The Master: Do not make that answer again. Answer the questions that are now put to you. That forty-four thousand odd dollars does not represent fuel alone, but represents fuel and coal carbonized, does it not?

The Witness: That represents both, yes.

Q. That is the case practically throughout all the statements of coal gas manufacture, is it not?

A. The form is the same throughout, yes.

Q. Take 1916 of the same exhibit, you have total 37790
cost of caking coal, $642.54; is that right?

A. That is correct.

Q. Then you show a net credit from residuals of $693.02?

A. Yes, that is correct.

Q. Which results in the net cost of coal carbonized being a credit of $50.48?

A. That is net cost of coal carbonized shows a credit, yes.

Q. In other words, more was received for the residuals than the coal carbonized or caking coal cost?

A. Yes, due to the fact that they had a big stock 37791
on hand at the beginning of the period.

Q. Yes, and due also to the fact that you included in those credits the sum of $250.30 for spent oxide odd; is that so?

A. I include that amount, yes.

Q. And if that amount were not in there the total charge for cost of coal carbonized would become a cost of $40.86, would it not?

A. No, it would be $202.02, as I make it.

Q. It would be a cost instead of a credit?

A. Yes.

37702 Benjamin Cohen, Cross.

Q. And that method of computation is carried out throughout the tables, is it not?

Mr. Clark: He has already testified to that.

A. The method is the same all the way through.

Q. That is, spent oxide operates as a credit to coal carbonized?

The Master: Yes, he said that.

Mr. Clark: He said that three times.

Mr. Vilas: In instances like that it makes a positive misstatement of the cost of coal.

Q. Take 42nd Street, Defendants' Exhibit AA-397
37703 for the year 1909. I find here among the residuals leading up to the net cost of coal carbonized an item "Drip Oil $2,781.51."

The Master: In coal carbonized?

Mr. Vilas: Yes.

Q. Why did you deduct drip oil from cost of coal carbonized?

A. The only reason I had to deduct any of these residuals, as I stated before, was on account of the method I followed throughout, adjusting all the residuals from the coal carbonized.

Q. You deducted them all in one place?

The Master: Yes.

37704 Q. You do not know where drip oil is obtained, do you?

A. I do not know anything about it.

The Master: He does not know anything about it. It is quite clear what this witness did. He took all the residuals, from whatever source or in whatever form they came, and deducted it from coal carbonized.

The Witness: In the residuals statement.

Mr. Vilas: It results in a misstatement of coal costs.

Q. Take 21st Street now, Exhibit AA-398, in the year 1918. That is the Schedule 26-C?

A. I have it.

Q. You have deducted there an item "Undistributed Adjustments, $67,393.47"?

A. That is right.

Q. Which you call Steam and Loss in Gas Volume Do you know what this undistributed adjustment refers to?

A. Why, it refers to the operation of that light oil recovery plant at 21st Street in connection with the extraction of certain oils by the government for 37796
which the company received that amount of money.

Q. They received that for steam used and for loss in volume of gas?

A. And for loss in the volume of gas.

Q. In the extraction of the light oil?

A. Yes.

Q. As entering into the cost of producing this steam or producing the volume of gas would you not include some labor?

A. I do not get your point there.

Q. Well, to produce that steam it took not only materials, but labor, did it not?

A. Why, I presume you cannot produce anything 37797
without labor. I do not know anything about how this steam was produced.

Q. Why did you apply this undistributed adjustment only to material and not to the gas making labor and material?

A. Because all throughout these statements, as I told you, I gathered all my residuals together in one place and made a deduction in that way.

Q. Do you consider this Undistributed Adjustment a residual?

37796 Benjamin Cohen, Cross.

A. Well, it is a credit the same as a residual is. It is a credit against the—

The Master: Well, that is the way you used it, anyhow?

The Witness: I used it as a credit against the cost or amount to produce.

Q. You used it irrespective of the analysis—

The Master: He put it in there just to credit it to something. He credited it to something instead of Material and Labor.

Mr. Villas: And thereby misstated the cost.

37798 The Master: Yes.

Mr. Vilas: It affects the total cost figure.

Mr. Clark: There is no testimony on that.

The Witness: It does not affect the total cost figure.

Mr. Clark: It does not affect the total cost at all.

The Master: Offhand I do not see how it can affect the total result.

The Witness: It cannot.

The Master: The net result, I mean. Whether it is deducted from one place or another, if you are trying to figure out what the net cost of the

37800 gas is, I do not see how it affects it.

The Witness: It does not affect it.

The Master: It cannot.

Mr. Chambers: I do not think it is a misstatement, either.

Mr. Clark: It is not a misstatement.

The Master: If he takes the total statement cost, it does not make much difference where you credit it, so long as you spent it.

Q. The same exhibit, for the year 1906 you have a statement Total Water Gas Fuel $425,225.52, do you find that?

A. Right.

Q. Two items below that you have the item Fuel Oil $148. Why did you not include fuel oil with your other water gas fuel?

A. For the same reason, as I stated before, that apparently the black book does not include it, and I followed their method. I believe it does not. I may be mistaken about that.

Q. Was there any black book for 1906 at the 21st Street Station?

A. No, but—

Mr. Clark: He did not testify there was.

The Witness: But I told you I took the 1917 37802
or 1918 and I adopted the same form throughout.

Q. I am talking about 1906.

The Master: Well, he says there was no black book for 1906.

A. There was no black book for 1906.

Q. You did not get this item from the black book?

A. I did not get any item from the black book. I adopted the form from the black book.

Mr. Vilas: He simply adopted the form, regardless—

The Master: Yes.

Q. And this form goes right through the statements as to water?

37803

A. I think you will find the same form throughout there. You won't find anything to vary that.

Q. Take Defendants' Exhibit AA-399.

A. What station is that?

Q. 99th Street Station, for the year 1915. Amount of water gas tar used 93,295 gallons; is that correct?

A. Yes.

Q. At the rate of 1.756 cents. Have you checked that computation, or is that one of those derived by division?

A. All those figures in that column are derived by division.

Q. I wish you would just make the derivation by division again and see if you get that rate.

The Master: Who are you going to put on next, Mr. Chambers?

Mr. Chambers: Mr. Maltbie I will go right on with.

The Master: Is he around? Is he here?

Mr. Chambers: I guess he is working on those pages 1 to 21 with Mr. Mrich. I would like to have him cross-examine Mr. Hine if I could get him here.

37805 A. Yes, I do get the same thing.

Q. You do get the same amount, do you?

A. Yes.

Q. How does it follow that in the item about water gas tar used under boilers you have 93,925 gallons, a different amount, in the same rate and the same dollars?

A. I can see that the error is apparently in the transposition by the typist of the figure in the lower — the figure opposite the residual line there.

Q. There is an error there?

A. There is a mistake there, yes. The two figures are always the same.

37806 Mr. Chambers: Then there was that Simpson matter in regard to Mr. Hine. They were to produce some papers here.

Q. Taking all of these cost sheets which you denominate "Station Costs," do you wish to have the Master infer from the figures thereon that you state the total cost of producing gas in the holders at the various stations, both in dollars and in cents per thousand cubic feet?

A. Why, it is not a total cost, there are no repairs in here. You would not find any.

By the Master:

Q. What else is missing?

A. There is no storage in there.

Q. What else?

A. These are simply the costs—

By Mr. Vilas:

Q. Wait a minute, tell us what else you have left out, please.

A. I do not recall offhand.

Q. Miscellaneous Works Expense?

A. That is left off.

Q. Station Distribution? 37808

A. That is not included here.

Q. Gas Storage?

A. That is not included.

Q. Repairs?

A. That is not included either.

Q. You are familiar with the uniform system of accounts, are you not?

A. Yes, in a general way.

Q. You are an employee of the Public Service Commission?

A. That is right.

Q. And the uniform system of accounts provides—

The Master: Let me ask you, I want to get this clear in my mind. 21st Street is water gas? 37809

Mr. Clark: Yes.

The Master: 99th Street is water gas?

Mr. Clark: Water gas.

The Master: Entirely so?

Mr. Clark: Yes.

The Witness: Entirely.

The Master: So that the Consolidated Gas Company in its two operating plants, at 99th Street and 21st Street, makes only water gas?

Mr. Clark: Only water gas.

37810 The Master: 14th Street and 42nd Street are coal gas plants?

Mr. Clark: Yes.

The Master: What is Ravenswood?

Mr. Vilas: Water gas.

The Master: I would like to see if there is any dispute about these things.

Mr. Vilas: The Ravenswood works is water gas only.

The Master: Water gas only?

Mr. Vilas: Right.

The Master: And the New York Mutual?

37811 Mr. Vilas: Water gas only.

Mr. Clark: Water gas only.

The Master: And the Standard?

Mr. Vilas: Water gas only.

Mr. Clark: The Central Union has both.

The Master: The Central Union is the only plant that has coal gas and water gas, except Astoria?

Mr. Clark: Right.

The Master: Astoria has coal gas and water gas?

Mr. Clark: Yes.

The Master: 14th Street and 42nd Street are

37812 coal gas stations?

Mr. Clark: All coal gas, yes.

The Master: In analyzing my figures for cost of production I correctly assume that everything except 14th Street and 42nd Street and the Central Union and Plants A and B at Astoria are water gas?

Mr. Vilas: That is right.

The Master: Plants A and B at Astoria and part of the Central Union?

Mr. Clark: Yes.

The Master: 14th Street and 42nd Street being coal gas?

Mr. Clark: Yes, that is as I understand it.

The Master: Just one more question.

By the Master:

Q. Mr. Cohen, taking 1918, your testimony is that according to the books of the company it cost them for the items that you show on this Exhibit AA-398 39.971 cents per thousand cubic feet of gas?

A. What stations?

Mr. Clark: The books show.

Q. 21st Street station, 1918. 37814

A. For the costs which the company includes in its production accounts.

Q. These items referred to on your statement?

A. That is correct.

Q. And it is limited to that?

A. It is limited to—these agree exactly with the company's production accounts.

Q. Yes, as to those items.

A. As to those items; that is right.

Q. Why did you eliminate the other items to which Mr. Vilas has referred?

A. I did not eliminate anything. I took the company's production accounts— 37815

Q. No, but why on your statement didn't you add the other items?

A. That is shown on Exhibit 25 which we submit.

Q. On another exhibit?

A. I only carried it up to that point. That is taken up on another exhibit.

Q. So the cost to produce gas according to your statement, based on the books of the company, at 21st Street, 1918, was approximately 40 cents per thousand cubic feet, excluding all other items to which reference has been made?

A. That is what the company shows.

Mr. Chambers: That is according to their books.

The Master: Yes, I say according to the company's books.

The Witness: That is what the company shows.

The Master: How much do you say it is?

Mr. Chambers: Well, we will get to stripping profits here shortly.

The Master: Mr. Chambers, ever since the case started I tried to get you to give me an answer to
37817 that simple question.

Mr. Chambers: Dr. Weber is working on it.

Mr. Clark: That is a very difficult question.

The Master: Go ahead, Mr. Vilas.

By Mr. Vilas:

Q. Have you got this Schedule 25?

The Master: No, do not bother about it.

Mr. Vilas: I want to know if he has this in somewhere else. I have not seen Schedule 25. What exhibit is it?

The Witness: I think it is 25.

Mr. Chambers: You have your tax in for real estate of corporations. There are items and items
37818 and items like that that are improper. If we can get all of those out we will tell you what the right figure is.

Mr. Vilas: Is this already in evidence?

Mr. Clark: Yes (handing paper to Mr. Vilas).

By the Master:

Q. You make the total on No. 25 according to their books 43.29, including the other items?

A. Yes.

Q. Is that right for 1919?

A. If you will add what I omitted you will get 43.29.

By Mr. Vilas:

Q. In the portion of the uniform system of accounts called Production Expenses you do find Account 609, Miscellaneous Works Expense, do you not?

Mr. Clark: I object to this.

The Master: I think I will sustain that objection. That book is in evidence.

Q. Would you say that the items Miscellaneous Works Expense, Repairs of Works, and other items, Gas Storage and Station Distribution, are parts of station cost? 37820

A. Why, I don't know that I am competent—

Mr. Chambers: Just a minute, I am going to object to that.

The Master: If you do it I will sustain the objection.

Mr. Chambers: I do object.

The Master: I will sustain the objection.

Mr. Chambers: Let me hear the question.

Mr. Vilas: The witness admits he is not competent to give an answer.

The Master: I do not care about the testimony. This witness has testified to a tabulation which excludes certain items, which undoubtedly and 37821
conceivably must be added to it, there is no question about that.

Mr. Chambers: I do not concede it.

Mr. Vilas: Another point, your Honor, that is very important in this connection.

The Master: What repairs are not part of the station cost?

Mr. Clark: Not repairs used in construction.

The Master: But you have got to add certain items to these items to get full station costs.

37822

Mr. Vilas: The vice in this table, your Honor, and in all of them, lies in the fact that he has deducted all his credits, all his residuals, before he gets to these items of repairs and so forth, and it actually does make a difference of over a cent in his total production cost—that one item of steam alone that I called atention to, in 1918.

The Master: That can be brought out in argument.

Mr. Vilas: It is a deceptive and misleading way of setting up tables.

Mr. Clark: I object to that. It is not deceptive
37823 and misleading.

The Master: You can bring it out.

Mr. Chambers: I object to that statement, deceptive and misleading.

The Master: Are you through?

Mr. Vilas: Yes.

The Master: You are excused.

(Witness excused.)

The Master: Judge Ransom, are you prepared to examine Mr. Hine?

Mr. Ransom: I am not.

The Master: Or Mr. Pyle?

Mr. Ransom: Well—Mr. Pyle.

37824 Mr. Chambers: Tables 6 and 7.

Mr. Vilas: Those are recapitulations.

Mr. Ransom: No, they have not been checked yet.

The Master: All right, call Mr. Maltbie then.

Mr. Clark: Mr. Vilas, is the black book here?

Mr. Vilas: No, it is not here now.

Mr. Clark: Mr. Armstrong promised this morning to get it. I spoke to him about it.

Mr. Vilas: In addition to the information elicited by the Master's questions as to the kinds of gas made at the various stations, I would like

to have it noted that at 42nd Street an oil gas is made for the purpose of enriching coal gas.

Mr. Chambers: Will you produce those statements that were dictated to Mr. Simpson?

Mr. Goetz: Yes.

Mr. Chambers: If the Master please, could Mr. Hine have those?

The Master: Yes.

Mr. Chambers: Mr. Hine, will you take these statements here that you dictated in the presence of Mr. Simpson.

37826

MILO R. MALTBIE resumed.

DIRECT-EXAMINATION CONTINUED BY MR. CHAMBERS:

Q. Mr. Maltbie, on Friday the 13th when you testified did you give a list of all cases with which you were connected?

A. I did not give a complete list.

Q. Or upon which you had been employed?

A. I did not.

Q. Could you tell how many cases other than the ones about which you did testify you have been engaged upon? 37827

Mr. Ransom: Objected to as immaterial.

The Master: Objection overruled.

Mr. Ransom: Exception.

A. After leaving the stand I counted up 15 matters and cases in which I have been employed since 1915, since I left the Commission.

Mr. Ransom: Was that in addition to those?

The Witness: In addition to those that I have mentioned in the record.

37828 Milo R. Maltbie, Direct.

Q. In regard to the functions of the Public Service Commission and yourself as Commissioner, will you please explain what you had to do with the passing on plans?

Mr. Ransom: Objected to as incompetent.

The Master: Overruled.

Mr. Ransom: Exception.

A. Well, the Public Service Commission for the First District had jurisdiction not only in regulatory matters over the corporations under its supervision but also had the powers transferred from the former
37829 Rapid Transit Commission, having to do with the laying out, construction and letting of contracts for the operation of rapid transit lines. While I was a member of the Commission I was chairman of the committee to which were referred all of the plans that were prepared for the various subways built by the City, before those plans were adopted by the Commission, for examination. I also had to do with the preparing of the contracts for the construction of the Rapid Transit lines, and particularly the operation of those lines by the Interboro Company and the Brooklyn Company.

Q. Mr. Maltbie, while you were a member of the
37830 Public Service Commission for the First District of the State, was there referred to you or did there devolve upon you in the first instance the work of fixing working capital in the various rate cases for the Commission?

Mr. Ransom: Objected to as incompetent.

The Master: I will allow it.

Mr. Ransom: The witness explained in great detail what was done.

The Master: I will allow it. Just answer the question, Dr. Maltbie.

Mr. Ransom: Exception.

A. Yes.

Q. Will you state—

The Master: No, I won't let him state. I am going to get categorical answers as far as possible, to get through with this. I am letting you lead the witness.

Q. In any of those cases that you recall, in which you recommended the amount of working capital, has the decision been reversed?

A. None of them have been reversed—on working capital. I will finish it—none of them have been reversed except upon two points in all the cases that 37832
have been taken up.

Mr. Ransom: I object. The witness is not a lawyer.

The Master: You are referring now to court reversals?

The Witness: Court reversals.

The Master: And they are expressed in court opinions?

The Witness: They are.

The Master: I will take the court opinions.

Q. Have you prepared a table showing the amount of working capital which in your opinion is proper?

A. I have.

Q. Which is proper for this complainant company 37833
each year from 1906 to 1918, inclusive?

A. I have.

The Master: Do you offer it, Mr. Chambers?

Mr. Chambers: Yes, I offer the tables. Just before I offer it there is a short cut.

Q. Mr. Maltbie, first did you analyze or have analyzed to a certain extent the accounts receivable of the Consolidated Gas Company, 1906 to 1918?

Mr. Ransom: Objected to as incompetent. What he had analyzed to a certain extent is vague and meaningless.

The Master: I will allow it.

Mr. Ransom: On the basis of Mr. Chambers' interrogation of the witness Little, this witness is surely disqualified.

The Master: I will allow it.

Mr. Ransom: Exception.

A. I did.

Q. Did you have an examination made of the amount of cash on hand and in the branch offices of the Consolidated Company, 1906 to 1918, inclusive?

A. I did.

37835 Q. Did you have analyzed, made for your use, the amount due from the City of New York and dates of payments to the complainant company?

A. I did.

Q. Did you have an analysis made for your use on the question of working capital, materials and supplies, accounts of the complainant company for the same period?

A. I did.

Q. Did you have an analysis or an examination made of the coal and oil consumed year by year from 1906 to 1918, inclusive, of the complainant company?

A. I did.

37836 Q. Did you ascertain the relation of oil on hand to the amount consumed by the complainant company for the same period?

A. Oil on hand at the end of the year.

Q. Oil on hand at the end of the year?

A. I did.

Q. And its relation to the amount consumed?

A. I did.

Q. From 1906 to 1918?

A. I did.

Q. Did you have an examination made of the company's records in regard to coal on hand at various

stations, 1906 to 1918, inclusive, or was it rather in relation to coal on hand?

A. No, but—

Q. Perhaps my question is not quite correct. What did you do in regard to coal on hand?

A. I had an analysis made of the coal on hand at the various stations for certain years, 1906, 1909, 1915 and 1918.

Q. Did you have an analysis of Production Expenses of the Complainant Company, separating Labor from Materials and Supplies?

A. Yes. 37838

Q. Covering the entire period, 1906 to 1918, inclusive?

A. Yes.

Q. Did you have an analysis made of the distribution of General and Commercial Expenses, including separation of accounts and not paid in advance?

A. I made such an analysis.

Q. Covering the entire period, Mr. Maltbie?

A. I cannot remember for sure whether that covered every one of the years or—

Q. It covered many years?

The Master: Some of the years.

A. It covered 1916, 1917, 1918, 1909, and I think 37839
1906. Yes, those were the years, and then the others were more or less general.

Q. Did you have an examination made, for your use in connection with the Working Capital, of Gas Appliances—Rentals Stoves?

A. Yes, I took off from the records in this case such a statement, and I had an examination made of the conditions of payment.

Q. Did you have an examination made of the relation of Gas Sales to the Accounts Receivable, 1906 to 1918, inclusive?

37840 Milo R. Maltbie, Direct.

A. Yes. Well, of certain of the years, specifically 1916, 1917, 1918, 1909, and I believe 1906.

Q. Did you have an examination made into the accounts of the Consolidated Gas Company, relating to refunds under the Injunction Proceeding of the 1905 case?

Mr. Ransom: Objected to on the ground it is wholly immaterial and has nothing to do with this case.

The Master: It is allowed. Why shouldn't that half million dollars which you have got and
37841 which you are using—

Mr. Clark: $400,000.

The Master: $400,000- be credited against your Working Capital?

Mr. Ransom: They can use it any time.

The Master: I have intended to ask you that sooner or later. I will ask you now.

Mr. Ransom: Working capital is a matter of investment and the question of who makes the investment is quite immaterial.

The Master: But the point of working capital is the money that you need year in and year out, and day in and day out, on the average, and
37842 month by month. Here is $400,000 that you have got and that will be called on as people wake up to the fact that they have got some claims; and in some years $40,000 or $50,000 is paid, more or less. But you have got the money and why shouldn't that be deducted from the amount you say you need for working capital?

Mr. Ransom: During a large part of this period, during the periods when it amounts to considerable sums.

The Master: We are talking about 1918 and 1919; we are talking about today.

Mr. Ransom: I do not see how that should be considered.

The Master: All right, answer the question, Mr. Maltbie.

Q. Did you answer that?

A. I did not answer the question. What was that?

Q. The examination into the accounts of the company relating to refunds under the Injunction Proceedings of the 1905 case.

A. I have taken off from the books of the company the balances in that fund from 1909 to the end of 1918. I have asked through Mr. Silverman for certain information as to the amounts upon which the company received interest—that is, the part of the twenty cents that was paid into the company over and above the eighty cents which is the rate in dispute. I have asked him to secure a statement showing the amount which was turned over to Mr. Shields and the amount which was kept by the company. 37844

Up to date he has not obtained that information, and consequently the statement which I have prepared for Working Capital covering the three years 1906, 1907 and 1908, does not include any amount as a deduction from the amount which the company would be entitled to have as Working Capital otherwise—does not include any amount for refunds due to the consumers, that is, moneys paid in by consumers upon which the company had to pay them no interest and upon which they might have obtained interest, or used for the purposes of the company without paying interest. The balance in the account runs almost uniform from 1910 to date. There has been very little change since the end of 1909. 37845

Q. If you were asked after all these analyses and information that you have stated you obtained from a study of the affairs of the Consolidated Gas Company,

and I addressed the questions to you as to each year 1906, 1907, to 1918, inclusive, would you make and give the answers as stated on this Table AA-200, for identification?

A. I would.

Q. And those amounts represent the correct amounts for Working Capital, do they?

The Master: In his opinion.

Mr. Chambers: In your opinion.

The Master: That he believes.

A. They do.

37847 Q. Strictly in your opinion. Do you believe that the amounts there are ample for working capital during those years?

Mr. Ransom: I object to the question. The witness certainly has not shown any qualifications to pass on what is needed in a business enterprise.

The Master: I have already passed on that question. Objection overruled.

Mr. Ransom: Exception.

The Master: I will take Dr. Maltbie's opinion, which I may or may not disregard in whole or in part in the light of your argument.

Mr. Ransom: What he is doing, he virtually

37848 says that in some few proceedings he has performed in a quasi-judicial capacity the function which your Honor will be called on to perform. If, for example, Judge Greenbaum were called here, would you call him an expert on this question?

The Master: I do not know, but I am going to take this exhibit for what it is worth.

Mr. Ransom: The fact that he has heard other men testify to these things? I assume he did not make his conclusions from other things. The basis of what Mr. Hine and other experts have

testified to, the fact that he reached a conclusion because he was given that power by law, does not make him qualified to perform in this case the functions of the Master.

The Master: We will take it.

Mr. Ransom: Exception.

Q. Just one or two more questions, Mr. Maltbie, and I will clean up with this. The first column, tell the Court what that column "B" means?

The Master: I think the paper explains itself.

Mr. Chambers: The three little plus signs there.

The Master: Yes, you might explain those 37850
three red plus signs. What do you mean by those plus signs there?

The Witness: I referred just a moment ago to the fact that I had asked for certain information which had not been furnished.

The Master: Yes.

The Witness: Consequently in column "C" the first three items cover merely the rentals paid in advance by persons having stoves and appliances and do not include in any of the three instances the refunds due from consumers which are included in that column in the amounts after 1908, so that the amounts with the plus signs indicate 37851
that the amount that should be deducted from the figure in the first column are at least that large and probably larger, and the minus signs in columns headed "D" and the last column are, of course, the converse of that, that is, that the amount is less than those amounts given.

The Master: Mark that paper in evidence, over objection, which is overruled, and exception allowed.

The Witness: I think, your Honor, there are

37852

perhaps one or two things that ought to be explained that may not be quite clear.

Mr. Chambers: Let us mark the paper first.

Marked Defendants' Exhibit AA-429

Mr. Ransom: I suppose I shall have to call Mr. Masten as an expert in order to rebut Mr. Maltbie's testimony.

Mr. Chambers: Mr. Who?

Mr. Ransom: Mr. Masten.

The Master: No, you won't.

Mr. Ransom: On the ground that he heard the

37853 testimony in this case and fixed a figure three times Mr. Maltbie's figure.

Mr. Chambers: Well, he is dead.

Mr. Ransom: Oh, no, he is alive. He is the real expert.

Mr. Chambers: Unfortunately, his decision was entirely upset by the United States Supreme Court.

Mr. Ransom: Not on that. It was followed on that.

Mr. Chambers: It was upset on all points it it was reversed.

The Master: What explanations did you want

37854 to make, Mr. Maltbie; what items do you think require explanation?

Mr. Chambers: Yes, will you do that?

The Witness: Well, the amount in column "C" is made up by taking the refunds which have not been paid back, which are roughly $430,000 back to the end of 1910 and $500,000, rounded off in each instance, at the end of 1909, plus one-half the amount which persons have paid in as rentals upon stoves and appliances, the one-half of the amount being—

The Master: One-half of the year.

The Witness: Yes, the average amount which they would have on hand for the year. "D," of course, is obtained as indicated. Then column "C" headed "Two Per Cent Interest on Cash Equal to Six Per Cent on the Amount," is found this way: I have taken the amount of cash which I have allowed the company as the average amount which they should have on hand, and compute two per cent interest on it, because they could obtain two per cent on their daily balance in that account, and have translated that into an amount on a six per cent basis, which is, of 37856
course, roughly obtained by taking one-third of the amount of working capital and deducting it here, and that gives the net amount of working capital.

If the interest on bank balances is included in the income statement which you use hereafter, this amount, of course, should not be deducted, and then the working capital becomes according to my opinion the figures given in the column "D" headed "Balance." But if you ignore on the income side the amount received from money on hand at the bank, then you should take the figure in the last column, if you adopt the principle. 37857

Q. What did you find the practice of the company to be with regard to gas appliances and stoves rentals?

A. Well, the testimony shows—

Mr. Ransom: I object to that.

The Master: Do not tell us what the testimony shows.

The Witness: Well, I accepted the testimony as correct.

Q. Can you give the amount of cash which you allowed in each instance here, going to make up your working capital for each of the years?

A. I can.

Mr. Ransom: Objected to. The witness has no qualifications to tell what amount of cash is needed for the working purposes of a business.

The Master: Objection overruled.

Mr. Ransom: He does not take the book figures, and he is not qualified to give an opinion.

The Master: Overruled.

Mr. Ransom: Exception.

The Witness: Year by year, did you say?

Q. Yes, if you please.

A. For 1906, $300,000; for 1907, $320,000; 1908,
37859 $340,000; 1909, $350,000; 1910, $360,000; 1911, $370,000; 1912, $390,000; 1913, $420,000; 1914, $420,000; 1915, $380,000; 1916, $400,000; 1917, $450,000 and 1918, $550,000.

Q. Materials and Supplies, Mr. Maltbie, that you allowed?

A. Materials and Supplies—

Mr. Ransom: I object to the question. The witness is not an engineer and the witness is not an operating man; he has never been connected with any business of this kind. He has no knowledge and has no way of getting a knowledge as to how much would be required on the
37860 basis of opinion. If he attempts to ignore the amount which the company actually had in the exercise of its business judgment, he gets into a realm of speculation, which is hypothetical and tends merely to be destructive.

The Master: Objection overruled.

Mr. Ransom: Exception.

The Witness: 1906, $600,000; 1907, $620,000; 1908, $630,000; 1909, $650,000; 1910, $650,000; 1911, $650,000; 1912, $620,000; 1913, $650,000; 1914, $610,000; 1915, $600,000; 1916, $600,000; 1917, $620,000, and 1918, $700,000.

Q. Can you give year by year the amount that you allowed for Accounts Receivable?

Mr. Ransom: Same objection as previously indicated.

A. No, I did not make it up that way.

Q. How did you treat that item?

A. Well, I made an allowance in addition to Materials and Supplies for three items, as I worked out the classification for Stoves and Appliances, which are not included in Materials and Supplies, for Operating Expenses advanced and for Gas Purchased, that is, the part of an amount which they would have to 37862
carry between the time when the bills were rendered and the time payment was made.

Mr. Chambers: I think that is all. Are you prepared to cross-examine him on Working Capital?

Mr. Ransom: Is this all of Mr. Maltbie's testimony in the case?

Mr. Chambers: No.

The Master: Then I will wait until Mr. Maltbie's testimony is complete. Go ahead and finish Mr. Maltbie's testimony.

Mr. Chambers: May I just speak to him a minute? 37863

The Master: Yes.

(The witness and counsel confer.)

Q. Mr. Maltbie, have you prepared a table designated for convenience "Table No. 1" in this case?

A. I have.

Q. This table designated for convenience Table No. 1 is entitled, is it, Cost and Book Appreciation of Land?

A. It is.

Q. You have prepared this table, have you, Mr. Maltbie, from exhibits and testimony? This table was

37864 Milo R. Maltbie, Direct.

prepared from the exhibits and testimony in this case and shows the cost of real estate and the amount at which it was entered on the books of the Consolidated Gas Company in 1884?

A. Well, it is that and shows that in part. There are other things shown.

Q. Will you explain in detail these figures on the table—you can explain in detail these figures?

A. I did not hear the question.

Q. I say, you can explain in detail these figures. I am not asking you to, but you can.

37865 A. I can.

Q. Will you explain Maximum Cost and Minimum Writeup?

A. Maximum Cost is shown in this table and is the amount shown in Senate Document 47 as being the cost of the real estate opposite the companies given in this table, and may include certain structures upon that land; that is, the cost may have included not only the cost of the land but certain structures on that land. Not having made any deductions beyond those shown for the structures I have called it maximum cost as the cost of the land may be less than that amount.

Q. And the Minimum Writeup?

37866 A. Well, in the second column.

Q. Book Entry?

A. There are given the various amounts and items of property at which this property was entered on the books of the Consolidated Gas Company in 1884 and the Minimum Writeup represents the difference between Maximum Cost and the book entries in 1884, excluding in the case of the three columns at the top of the table the items given below, called Additional Items, those items having been eliminated from all of the figures given opposite the six companies named.

Mr. Chambers: I suggest it is one o'clock and that we take a recess.

The Master: Don't you worry about the time. Finish this.

Mr. Chambers: I want to take up the matter in which Senator Boylan is concerned.

The Master: Finish this.

Q. Is the table correct?

A. It is.

Q. From the sources you have mentioned?

A. It is.

Mr. Chambers: I offer the table in evidence. 37868

The Master: You present it as a correct tabulation, do you?

Mr. Chambers: Yes, sir, from the testimony in the case.

By the Master:

Q. Is that what you say it is, Mr. Maltbie, a correct tabulation from the data?

A. I do not know as you would call it a correct tabulation. It is a correct statement. That is, all of the figures found in the table have been obtained from Senate Document No. 47.

Q. Including additional items?

A. Yes. 37869

Mr. Ransom: The Yalden report.

The Master: Well, that is part of the Senate document.

Mr. Chambers: No, do not misstate it. He said Senate Document 47; it is not entirely from the Yalden report. I offer it in evidence.

The Master: What is it on?

Mr. Chambers: Testimony in Senate Document 47, the Yalden report and Yalden's testimony, which is in evidence; the testimony of the officers of the company, perhaps.

37870

Mr. Ransom: Perhaps? Don't you know?

Mr. Ransom: Yes, officers of the company some. I offer it in evidence.

Mr. Ransom: I object to it. If your Honor has any doubts about it I would like to be heard on the matter.

The Master: I will hear you on that.

Mr. Ransom: This tabulation apparently is made up on the basis of a contrast between what the property cost this company, as embodied in the Consolidated agreement under legislative sanction, and what was done pursuant to the con-

37871 solidation agreement, and as shown by the books of the company, with figures which represent the inferences of this witness or some other unidentified persons as to what this property cost the constituent companies insofar as that is indicated in the Yalden report and Yalden's testimony before the Senate Committee at the time of that body's non-judicial investigation. The question of what was the cost of the property to the constituent companies, if it were ascertainable now, is wholly outside any issues in this case.

Mr. Chambers: It is ascertainable.

The Master: Do not interrupt.

37872 Mr. Chambers: I beg your pardon.

Mr. Ransom: Under the view which your Honor has given and very plainly under the construction which I think should be put upon the opinion of the Supreme Court of the United States. The cost of these properties to the complainant company under the legislative plan in 1884 is a starting point, binding upon these representatives, of the legislative power and binding upon your Honor. The question of ascertaining, if it were material, the cost of these properties to the constituent companies, is something which

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is fraught with the greatest difficulties and involves the question of the accuracy and completeness of the so-called Yalden report, which was not made in any judicial proceeding.

The Master: Mr. Chambers, this is my view of the situation: If Judge Ransom had not brought in part of Senate Document 47 I should have consistently ruled out any evidence at all as to the original cost of these properties to the constituent companies. As the record shows, Judge Ransom did offer part of Senate Document 47, and I sustained your right to offer other parts of Senate Document 47. So that Senate Document 47 is 37874
now in evidence, as I understand it. This statement here is simply a summary of what you say—

Mr. Chambers: Then he has offered another very important piece of evidence out of that document, the Rowland report.

The Master: Yes, but whatever there is in the record.

Mr. Chambers: Yes.

The Master: It simply means an analysis of the record by me to arrive at this. So this is simply for the convenience of the Master.

Mr. Chambers: Yes, you said you would take it once, whether you agreed with me or not. 37875

The Master: Take what?

Mr. Chambers: You said you would let me show the cost.

The Master: I have let you show it.

Mr. Chambers: Yes, but this is just for your convenience, that is all. You do not want to wade through that Senate document.

The Master: I am not going to. I am going to dispose of this offer in the same way I disposed of another offer of two documents this morning; matters that are purely for convenience of the

37876

Master I shall take as part of the summing up and check myself unless counsel agree among themselves that all statements of that character for the convenience of the Master shall be received.

I shall therefore sustain the objection on the ground that this is not proof of any fact, but is simply a memorandum to aid the Master. I will be glad to have it, and I shall ask you for it when it comes to summing up this record.

Mr. Chambers: Shall I go right on?

The Master: We will adjourn until two o'clock.

37877 Mr. Chambers: Senator Boylan is working on a matter that he cannot complete until Friday at eleven o'clock. One of his assistants is sick.

The Master: What is it you want to prove by Senator Boylan?

Mr. Chambers: It relates to the 15th Street office building. I only bring it up to show that if the case is completed before Friday, why, there is that testimony that I expect to offer and the reason why I won't have it ready until Friday at eleven o'clock.

The Master: I will try to handle that for you in some practical way.

37878 Mr. Chambers: Of course I have not had a chance to go over it with Senator Boylan yet, but I expect between now and Friday at eleven we ought to have an opportunity.

The Master: If Senator Boylan can possibly have it for Thursday do so, and if he says he cannot I will try to handle it in some practical way.

Mr. Chambers: All I say is that you whittle me to the bone on time and everything else. I am working up to midnight every night.

The Master: So am I, Mr. Chambers.

Recess.

Afternoon session.

Mr. Chambers: I would like to have it noted on the record that I request the complainant company to furnish to Senator Boylan the leases of the 15th Street Office Building.

Mr. Ransom: Has Senator Boylan made any request for the leases of the 15th Street Office Building?

Mr. Chambers: This is the first request.

Mr. Ransom: The leases were once in court. Senator Boylan may examine the leases at 15th Street any time he pleases.

37880

Mr. Chambers: At 15th Street, Senator. That is satisfactory.

The Master: Whom shall he get them from? Who shall he ask for?

Mr. Ransom: If Mr. Davidson is not there, let him ask Mr. Brundage.

The Master: Ask for either Mr. Davidson or Mr. Brundage.

Mr. Chambers: I have put in all I have for Mr. Maltbie right now. The tables have not come up yet, but we expect them momentarily.

The Master: Then cross-examination will be suspended until you are through with him.

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WILLARD F. HINE resumed:

DIRECT-EXAMINATION BY MR. CHAMBERS:

Q. Mr. Hine, I show you memorandum of data requested by Mr. Hine, associated with Milo R. Maltbie, expert for the Attorney General of the State of New York, subject Mains, Estimated Original Cost and Reproduction Cost. Have you looked at this memorandum here? It bears your initial?

A. I have.

Q. And that is the memorandum you spoke of the other day that you submitted to Mr. Simpson?

A. It is.

Q. Also this memorandum here, the third sheet?

A. With respect to services, yes, sir.

Mr. Chambers: Both sides agreed, if you remember, to have that spread on the record.

Mr. Ransom: I do not care to have the title spread in the record and Mr. Hine's admission or claim as to the—

37883 The Witness: That was dictated by Mr. Simpson, I did not dictate the title.

Mr. Chambers: It is not Mr. Hine's at all.

Mr. Ransom: Well, I doubt whether Mr. Simpson would be entitled to make any such statement.

The Master: What difference does it make?

Mr. Chambers: I will just let it stand for what it is worth.

The Master: Spread this request on the record.

The request is as follows:

"9 30 1".

Memoranda of data requested by Mr. Hine, associated with Mr. Milo R. Maltbie, expert for

37884 the Attorney General, State of New York.

Subject: Mains—Estimated Original Cost and Reproduction Cost.

Length of each size and kind of main. Estimated as to rock excavation.

Estimated average cover over each size and kind of main.

Estimated length of each size and kind of main, under each kind of pavement and basis of estimate.

Number of valves of each size and kind.

Valve pits of each size and kind.

37885

Number of railroad and street car crossings of each size and kind (same over mains when originally laid).

Number of fittings of each size and kind.

Number and length of each size and kind of river crossings.

Estimated amount of excavation for each size and kind of main.

Estimated unit cost for ordinary excavation, per cubic yard or number of feet of main of each size.

Estimated unit cost of rock excavation, per cubic yard or per foot of main of each size.

37886

Amount of lead or lead wool estimated as being required per joint for each size of main.

Estimated amount of yarn required per joint on each size of main.

Estimated original cost of pipe of each size and kind per ton or per foot.

Estimated original cost for each kind and size of valve per valve.

Estimated original cost for each size and kind of fitting per fitting or per pound.

Estimated cost per foot for laying mains of each size and kind, in each kind of excavation.

Estimated cost of city inspection for each size and kind of main.

37887

Other details of estimated unit cost for each size and kind of main.

Details of estimate of unit cost of street car crossings and railroad crossings, etc., of each kind, over each size and kind of main.

NOTE—Above costs are desired both on the basis of estimated original cost and estimated reproduction cost.

Estimated unit cost per foot for each kind and size of main.

Estimated cost per foot of main for each size, or per square yard for each kind of pavement."

Q. Does the estimate of original cost cover paving replaced when mains were originally laid, or does it cover pavement existing over mains at the present time?

Q. Does the estimated reproduction cost cover pavement replaced over mains when originally laid or pavement existing over mains at the present time?

"9/30/19.

Memorandum of data requested by Mr. Hine,
37889 associated with Mr. Milo R. Maltbie, expert for the Attorney General, State of New York.

Subject: Services—Estimated Original Cost and Reproduction Cost.

Length of Services used estimated original cost and replacement cost. Details as to fittings estimated.

Amount of excavation for each size and kind of service.

Number of each size and kind of services estimated as under each kind of pavement in each case, and the amount of pavement estimated as required to be replaced.

37890 Basis as to estimated length services.

Basis as to estimate of pavement over services.

Details of estimated cost (Original and Reproduction) for each size and kind of service.

Unit cost (Original and Reproduction) for each size and kind of service.

Number of each size and kind of service estimated as in rock, amount of rock excavation, and basis of estimate."

Q. Did you get the information called for in these three sheets?

A. No, sir.

Q. Never got it?

A. No, sir.

Mr. Chambers: That is all. I think that is all. Are you ready to cross-examine Mr. Hine yet?

Mr. Ransom: No.

The Master: Cross-examination suspended. Next witness.

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ROBERT F. HENDRICKSON, called as a witness in behalf of the defendants, being duly sworn, testified as 37892
follows:

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Hendrickson, where are you employed?

A. Department of Taxes.

Q. What part of the Department of Taxes?

A. Real estate of corporations.

Q. Under Mr. Hart?

A. Yes.

Q. How long have you been there?

A. Six or seven years.

Q. Have you produced from that office the public book known as the annual record of the assessed valuation of real estate? 37893

A. This is it here.

Q. For the year 1912?

A. Yes, sir.

Q. Will you turn in that book to the assessment against the Consolidated Gas Company of New York or its constituent companies, real estate of corporations?

Mr. Ransom: I object to the question so far as it relates to constituent companies.

The Master: Objection sustained. I don't know what constituent companies means.

Mr. Clark: The Harlem Gas Light Company, the Equitable Gas Light Company, the New York Gas Light Company and the Municipal Gas Light Company.

Mr. Ransom: They were not in existence in 1884. There hasn't been any such thing for—

Q. Are those companies assessed by your bureau each year?

Mr. Ransom: Objected to.

Mr. Clark: Why, you proved some property here that was owned by those companies, you are
37805 still carrying it, it does not mean anything.

Mr. Ransom: I surely did not.

Mr. Chambers: Only you have not changed it on the book, you have not changed the name.

The Master: Objection sustained.

Mr. Clark: If your Honor please, you will remember that Mr. Hart testified that they assessed this real estate of corporations against the constituent companies.

Mr. Chambers: You mean the predecessor companies.

Mr. Clark: The predecessor companies. I want to show that the same method was pursued
37806 in all years, 1912 to date. Mr. Hart just came into the department this year, if you remember.

Q. Do these books show how the assessment of real estate of corporations that include the Consolidated Gas Company is made on your books?

Mr. Ransom: Objected to, incompetent, irrelevant and immaterial.

The Master: What bearing has that on this case?

Mr. Clark: Proving it is a duplicate tax.

The Master: What?

Mr. Clark: Proving this real estate of corporations is a duplicate tax.

The Master: All right, go ahead.

Mr. Ransom: In the years in which it is a duplicate tax, it is not included of course.

The Master: Go ahead, Major.

Q. Will you turn to the tax against the Harlem Gas Light Company?

A. Yes, sir.

Mr. Ransom: For what year?

Mr. Clark: For the year 1912.

Q. That is a tax assessed against what?

Mr. Ransom: Objected to, immaterial and incompetent? 37898

A. Mains.

Mr. Chambers: It is assessed both against the Harlem Gas Light Company and the Consolidated Gas Company of New York, both names, isn't it?

The Witness: Yes.

Q. And what is it assessed against?

A. The description is mains, pipes and appurtenances.

Q. And are the other predecessor companies of the Consolidated and the Consolidated Gas Company similarly assessed in that year?

A. Yes.

Q. Have you a table that shows what the other amounts are? 37899

The Master: The amounts?

Mr. Clark: I don't care for the amounts, if I get the names of the companies.

Q. What companies are so assessed?

A. Knickerbocker, Harlem, Manhattan, Metropolitan, Municipal and New York.

Mr. Ransom: Municipal what?

The Witness: Gas Light Company.

Mr. Ransom: Municipal what?

The Witness: Municipal Gas Light Company.

The Master: And New York what?

Mr. Clark: New York Gas Light Company.

Mr. Chambers: And the Metropolitan Gas Light Company?

The Witness: They are all here.

Mr. Chambers: Manhattan Gas Light Company, Knickerbocker Gas Light Company.

The Master: He has already read them all.

Mr. Chambers: He just read the first name, and I thought you and Judge Ransom were criticising him for just saying Municipal, and so on.

37901 Q. And the tax in each case is the same sort of property, mains, meters and services?

A. Yes, sir.

Mr. Chambers: Mains, pipes and appurtenances.

Mr. Clark: Mains, pipes and appurtenances.

Q. Is there also a tax in that year against the Consolidated Gas Company which is not assessed against those predecessor companies?

A. Yes, there is.

Q. And that is for what kind of property, will you state?

37902 A. This is special franchise tax, and then there is real estate of corporations tax.

Q. And the real estate of corporations tax is against the Consolidated Gas Company alone, and is on what kind of property?

A. It is on small, what they call revokable consents, small pipes and bridges and ash conveyors.

Q. And that is a small amount, is it?

A. Yes, but this is the special franchise.

Mr. Chambers: And does this one here, the special franchise, cover the property that you mentioned over there?

Mr. Ransom: Objected to as incompetent.

Mr. Clark: That is the state's special franchise.

Mr. Ransom: How can he state what the law covers?

Mr. Chambers: Do you know what that covers?

Mr Ransom: Objected to as immaterial and incompetent.

A. No, I could not tell you.

Q. And in each year there is a tax of a small amount, or an assessment of a small amount to the 37904
Consolidated Gas Company alone for these revocable rights?

A. Yes.

Mr. Ransom: I object to the question.

The Master: I will allow it.

Mr. Ransom: What does he call a small amount?

Mr. Chambers: Well, do you want the amount on the record for each year?

Mr. Carter: No.

Mr. Chambers: I ask him to give it for 1912.

The Master: No, I won't take that. 37905

Mr. Chambers: Each year the amount.

The Master: I won't take it.

Mr. Chambers: I heard Mr. Carter say no. Why?

The Master: Is there any other question, Major Clark?

Q. Now, there is an assessment for a small amount on—

The Master: He said that three times.

Mr. Clark: He did not answer.

The Master: Yes, he did, three times

Q. In each year from 1912 to date, there is a small amount?

A. Yes.

Q. And there is also the assessment against these predecessor companies for mains, meters and pipe connections?

A. Yes.

Mr. Clark: That is all.

The Master: For each year from 1912 to date?

The Witness: Yes.

The Master: Next witness. Anything else,
37907 Mr. Chambers?

Mr. Chambers: Yes. The tables have come. Wait until we get them straightened out a minute.

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MILO R. MALTBIE, resumed:

DIRECT-EXAMINATION BY MR. CHAMBERS:

Mr. Chambers: Just make a note that we give the additional copy of No. 118 table that we promised to furnish to the complainant.

37908 Mr. Ransom: That is one blueprint copy?

Mr. Chambers: Well, we lacked one of them this morning.

Q. Now, Mr. Maltbie, have you prepared a table designated as No. 2 for convenience?

A. I have.

Q. Does this table show parcel by parcel, the cost of certain land up to January 1, 1906?

A. It does.

Q. And the table designates, does it, the block and lot and the map. The map referred to is the copy of Defendants' Exhibit AA-126?

A. Correct.

Q. And then gives the lot and block and item—what item does that refer to, the word "Item"?

A. Merely a number for convenience in reference to the entire line.

Q. And in the last column is the cost?

A. That is correct.

Mr. Ransom: I object to that. How can he state what the cost is? It is either the book cost or it is something else nebulous and hypothetical and allegorical that this witness has done.

Q. Now, what is the source of the information for making up this table? 37910

A. Well, there are several sources. Senate Document No. 47 is one, certain tables that have been put in evidence, and in one instance the 1884 valuation of the property of the Consolidated Gas Company as it was taken over on their books.

The Master: This is another one of those tabulations for the convenience of the Master, isn't it?

Mr. Chambers: You could not work this out, it would be impossible.

Mr. Ransom: Or anybody else.

The Master: It does not involve knowledge here or opinion, does it? 37911

The Witness: Yes, it involves opinions.

The Master: Well, suppose you bring out the opinions.

Q. Now, the very first one, Block 239, Lots 1 and 5.

Mr. Ransom: If that is meant as a question I object to it, this witness hasn't any qualifications to give values of this company's property in 1884.

The Master: I have not heard any question yet.

Mr. Chambers: He is not going to give it. If that was so I would not ask him the question.

The Master: Well, what is your question?

Q. I asked him just to explain the ones that involve methods of apportionment, or where his judgment entered in in making the computation.

The Master: Ask the question. You say take something. Ask your question.

Q. Well, that very first one, does it involve apportionment or methods of reaching the result which
37913 is not easy to understand without an explanation?

The Master: I don't care anything about it.

Mr. Ransom: I object to the question.

The Master: Objection sustained.

Q. Well, will you state how you treated each one, one by one?

Mr. Ransom: Objected to as immaterial.

The Master: I will sustain that objection.

Q. How you arrived at the figure?

The Master: Take the first item, what does that item represent?

Mr. Chambers: That is what I asked him first.

37914 The Witness: That represents two factors, one is an amount of $40,000 which is the book cost of the land and building of the Hester Street property as shown in Senate Document 47, and $760 which is taken from one of the tables, either 117 or 118, that was put in evidence this morning. I think it is Table 117. The initial B is to indicate that a building is included with the land in this cost as there was no possibility of separating the two. Now, the next one—

The Master: Next what, the next item?

Mr. Chambers: The next item.

The Master: Well, it is simply a summary of testimony, isn't it, that first item?

The Witness: That is correct.

Q. Now, the second one?

The Master: Is the second one simply a summary of testimony?

Mr. Ransom: It is the use of some unidentified solution of the Yalden report.

The Master: Is the second item a summary of testimony?

The Witness: Not alone, no. It could not be 37915
found in the testimony directly as given there.

By the Master:

Q. Where did you get any figure from?

A. Well, I shall have to hunt up the facts in that specific case.

Q. Let me ask you, whatever figures you have here are based upon some information you got somewhere?

A. They are all based upon Senate Document 47.

Q. Or exhibits that have been put in evidence.

A. Yes.

Q. Well, it is not a matter like depreciation that you are testifying to as an expert? 37917

A. Well, just let me explain. Some of these parcels of land, the exact cost of which is not shown in the form given here—

Q. Yes.

A. (Continuing.) In Senate Document 47, for instance, the cost is shown of a larger piece of land.

Q. Well, how did you undertake to pick out part of it?

A. Well, I used various methods of doing it, all of which I believe are absolutely fair, so far as the company is concerned; they may be a little high.

The Master: I won't take that.

Mr. Chambers: You mean you won't take that answer?

The Master: I won't take this table. I won't take that kind of testimony. You better ask questions and answers as to each piece and each plot and each parcel, then we will see where it leads us to.

Q. The first item you spoke of, Block 239, Lots 1 and 5, map one, $40,760, you have explained that.

The Master: No, I am going to allow that
37910 I will strike out his explanation of the first item. Now, you ask another question.

Mr. Chambers: Well, I object.

The Master: I know you do; objection overruled, exception.

Mr. Chambers: Exception.

The Master: You ask Mr. Maltbie such questions as you think proper to bring forth the information which he has on his tables, and I will rule on it as you go along.

Q. Item 1, Block 239, Lots 1 and 5, Map 1—

Mr. Chambers: Well, why ask him again?

The Master: Because I have stricken it all
37920 out.

Mr. Chambers: Well, I object.

The Master: I have overruled your objection.

Mr. Chambers: You brought it out yourself. I do not see why you bring out something and then strike it out. I ask him what you asked him.

The Master: I will sustain an objection if you do.

Mr. Chambers: Well, there is no objection.

Mr. Ransom: There will be whenever you ask it.

Mr. Chambers: It is your own question.

The Master: But I have stricken it all out. Now, go ahead and ask Mr. Maltbie whatever question you want to ask. Do I understand that you want to ask Mr. Maltbie what was the value of Block 239, Lots 1 and 5 on January 1, 1906?

Mr. Chambers: No, I want to ask him what it cost.

The Master: What it cost?

Mr. Chambers: As shown by the evidence in the case. 37922

Mr. Ransom: Objected to.

Mr. Chambers: As separated.

The Master: Well, ask it.

Mr. Chambers: Each one. I think you will want this yourself, the cost of each particular piece of property.

The Master: Well, ask that question just as you have explained it to me, and I will rule on it.

Q. Have you ascertained the cost of Block 239, Lots 1 and 5, as shown on Map 1 of Exhibit AA-126, as of January 1, 1906?

The Master: Ascertained it where? 37923

Mr. Ransom: Objected to as incompetent.

Mr. Chambers: What?

The Master: Ascertained it where? You say, have you ascertained the cost as of January 1st.

Q. Have you shown the cost, I will put it that way?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Chambers: Well, why? I don't see. Don't you want each one of these lots separated out?

37924

The Master: I don't know what I want, I am trying to find out what you want.

Mr. Chambers: Well, I want to show them separately, so that there is no—

The Master (interrupting): Do you want me to tell you what I am trying to show?

Mr. Chambers: I think you will take this, if you understand it.

The Master: Well, do you want me to tell you what I am trying to show you?

Mr. Chambers: Yes.

The Master: I will ask Mr. Maltbie a ques-
37925 tion, and I will sustain an objection to my own question, to see if you can understand it then. Mr. Maltbie, what did you ascertain from the record in this case was the cost of Block 239, Lots 1 and 5, Map 1?

Mr. Ransom: I object to the question.

The Master: Objection sustained upon the ground that I will analyze the record myself and find out what it shows the cost to be.

Mr. Chambers: Well, you cannot do so.

Mr. Ransom: Yes, he certainly can.

The Master: Well, I would not let this wit-
ness do something I cannot do from the record
37926 in this case.

Mr. Chambers: Why not, after he has worked—

The Master (interrupting): Certainly not. I am not going to have him construe testimony for me.

Mr. O'Brien: What if it is as a result of a calculation made with factors in the testimony.

Mr. Chambers: He has not.

The Master: Next question.

Mr. Chambers: Exception.

Q. Have you ascertained the book cost as shown by the testimony in this case, of Block 689, Lot 17, as shown on Map 2 of Defendants' Exhibit AA-126?

Mr. Ransom: Objected to on the grounds previously indicated.

The Master: Same ruling. If you say the record shows these figures, I will take this as a memorandum, and let you point out on the record how you arrived at them. I won't take Mr. Maltbie's statement that he construes the testimony to result in certain figures.

Mr. Chambers: Just wait a minute. You allowed Mr. Teele—I do not ask you if you did not, I know you did, you allowed Mr. Teele, and they are exhibits here in the case, to make apportionments and computations and use his judgment and discretion as an accountant in making certain apportionments and computations, and you took all that, and it is in the case. 37928

The Master: I won't take what you are offering.

Mr. Chambers: That is all we ask, is permission to do with the real property what Mr. Teele has done, take the liberty as in many other things it has been done in this case right along up to the present time by complainant. 37929

The Master: I won't take it.

Mr. Chambers: Exception.

Q. Now, Block 690, Lot 12, the property shown on Map 3, on page 3 or Map 3 of Exhibit AA-126, have you shown all the book cost, or the cost as shown by the evidence in this case, of that lot and block?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception.

37930

The Master: There is no necessity for repeating that question as to 42 different items on this statement, my ruling will be the same. It is a waste of time. If you say it is a tabulation of matters in evidence, I will take it. The minute you show that it is not a tabulation I have got to refuse it.

Mr. Chambers: Well, it involves an apportionment.

The Master: Well, it does not involve an apportionment. It involves a theoretical result based upon what the witness thinks the evidence

37931 shows.

Mr. Chambers: That is what Mr. Teele did.

The Master: Don't argue with me.

Mr. Chambers: Didn't he, now?

The Master: I said don't argue with me.

Mr. Chambers: I am asking you a question.

The Master: I decline to answer it.

Mr. Chambers: Didn't Mr. Teele use his judgment?

The Master: Have you any other questions of Mr. Maltbie?

Mr. Chambers: Well, I know, but why are you so hard upon the defendants, when we try to

37932 put in the same kind of proof that the complainant did.

The Master: If you do not want any more questions of Mr. Maltbie, I will excuse him.

Mr. Chambers: I wish you would answer that question. I would like to ask him all those questions, as to each piece of property.

The Master: I won't let you.

Mr. Chambers: Exception.

The Master: I am not going to sit here a week to have the same thing repeated forty times.

Mr. Chambers: It would not be the same question, it would be the same general line.

The Master: You better ask Mr. Maltbie something that is useful to me in this case.

Q. Is this table correct, Mr. Maltbie, using the sources that you have spoken of as the basis for it?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Chambers: Exception. I will ask the table to be marked for identification.

Mr. Ransom: I object to its being marked.

The Master: Objection sustained.

Mr. Chambers: Exception, I offer this table in evidence, designated for convenience Table 2. 37334

The Master: Is that the one I just ruled out?

Mr. Chambers: Well, you have not ruled it out yet.

The Master: Is that what you wanted to mark for identification

Mr. Chambers: Yes

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Now, this Table No. 2, designated as Table No. 2 for convenience, does it show, or can you give the total cost of the land as of January 1, 1906, as shown by the testimony in this case, of Block 239, Lots 1 and 5, Block 689, Lot 17? 37335

The Master: Are you going to read those 42 items?

Mr. Chambers: Yes.

The Master: And the other 42 items on this exhibit?

Mr. Chambers: Nobody will ever know what it is.

The Master: Well, they will never know

then. I am not going to let you read them off.

Mr. Chambers: Well, that may sound funny to the other side, but how will my question be intelligible?

The Master: Your question is intelligible enough when you say on the 42 parcels that you have enumerated on this schedule, and which you have designated as used and useful.

Mr. Chambers: Yes.

The Master: I will sustain the objection.

37337 Mr. Chambers: They won't know what lots and blocks.

The Master: Yes, they will. They are the same ones as designated as used and useful on Exhibit AA-126, aren't they, Mr. Maltbie?

The Witness: Yes.

The Master: I won't let you get in the total when I have refused to let in the figures for particular lots.

Mr. Chambers: Well, I am making the record now, you see.

The Master: There is no use asking 42 questions or enumerating 42 parcels.

37338 Mr. Chambers: Well, I am trying to do it so as to avoid some technical question as to the form.

The Master: There won't be any technical question as to the form. I am trying to make the objection go right to the substance of it.

The Witness: Table 2 relates to the same parcels of property as shown in Defendants' Exhibit AA-126 except the parcels shown in Exhibit AA-126 which were acquired after 1906.

The Master: Yes. So that you may have it clearly on the record, Mr. Chambers, I am not

37936a

going to let Mr. Maltbie testify that, taking other testimony in the case, he figured out that certain parcels, according to that testimony, cost a certain sum. The record must either be in such shape that I can figure it myself, or I cannot take it at all.

Mr. Chambers: He has only added the assessment to the total.

The Master: No, he has not. Go ahead now.

Mr. Chambers: Well, I mean so far as the cost is concerned, and then he has tried to show you the cost of certain parcels.

The Master: Objection sustained. 37937a

Mr. Chambers: Where the cost of a whole block and lot were given, can't he figure out the cost of the parcels for you?

The Master: Objection sustained. You can figure it out in argument for me, and it will be just as useful as Mr. Maltbie's testimony.

Mr. Chambers: No, you have got to have somebody testify that the figure is correct.

The Master: No, you need not.

Mr. Chambers: How are you going to say, if I figure it out in the brief, that it is correct.

The Master: I will do it myself.

Mr. Chambers: I do not think you can, with 37938a all due respect to you.

The Master: You haven't much respect for my ability to calculate on ordinary simple problems.

Mr. Chambers: Well, just take one of them now and I will give you the figures, and see if you can do it.

The Master: No, I won't. If you do not go ahead with the testimony I will have Mr. Maltbie's testimony closed. We will see whether I can figure it out when we come to the close of the case.

37939

Mr. Chambers: I do not see why you repeatedly say that.

The Master: Because you don't go ahead.

Mr. Chambers: Well, I am making a record, and I am going ahead.

The Master: Getting ahead about as far as I did in Florida, trying to get to Cuba.

Mr. Chambers: I did not expect you would rule this out, and now I am trying to get clearly on the record what he did do.

Q. Will you say, Mr. Maltbie, what process you used or what method you used in ascertaining the book cost as shown by the testimony, of these various forty-two pieces of real property? 37940

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Did that process involve any judgment and discretion on your part, or was it purely a matter of mathematical calculation?

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception. 37941

Q. What were the figures you used in reaching the cost of this piece of property shown on Table 2, and are those factors that you used found in the testimony in the case.

The Master: I shall allow the witness to say that the factors are found in the testimony in the case, if that is the fact.

A. Well the basic figures are found in the testimony in the case, but not all of the methods or principles applied are found in the testimony in the case.

The Master: But the figures to which principles were applied are in the case?

37942 Milo R. Maltbie, Direct.

The Witness: Yes.

Q. And you can show, can you, parcel by parcel, just exactly how you found the cost of each parcel as of January 1, 1906?

A. I can.

Q. I think that is all as to that table. Now, did you prepare another table known as Table No. 3?

A. I did.

Q. That shows the additions to the cost of land, 1906 to 1918 as shown by the testimony in the case?

A. All of the figures given in this table can be
37943 obtained from the testimony and the record in the case, but not all of them can be obtained just as they stand; that is, some of the figures must be obtained by taking figures that are in the testimony and—

The Master: And doing what with them?

The Witness: Apportioning them.

The Master: Well, give me one to illustrate what you did.

The Witness: Well, in the first place—

Mr. Ransom (interrupting): I object to it.

The Master: I just want to take one as illustrative of what Mr. Maltbie did.

37944 The Witness: I can give a view of them by a general statement here.

The Master: Just give me one. Generally speaking, I understand I can get these figures from the testimony in the case.

A. The first thirty-two items, or not the first thirty-two, there are some blanks, some left out, but from 1 to 32 can be all obtained from Tables 117 and 118, Exhibits AA-427 and AA-428.

The Master: Yes.

The Witness: The next figure, Item 33, relating to Parcel 2 of Block 989, Lot 1, must be

obtained by apportioning the figure given in Senate Document 47 between Parcel 1 and Parcel 2, the entire cost of that being shown for the whole block. I do not mean apportion between Parcel 1 and 2, but the figures given in Senate Document 47 gives the cost of that entire block, and I have apportioned that entire cost the part in my judgment that relates to Parcel 2 of Lot 1, Block 989.

The Master: I won't take that, it is a pure guess.

The Witness: And there are two or three 37946
other items of that kind.

The Master: You did it on the area basis, I suppose?

The Witness: I did it on an area basis and then raised the figure.

The Master: Well, so much the worse.

By Mr. Chambers:

Q. Is it a guess, Mr. Maltbie?

Mr. Ransom: I object as incompetent.

The Master: Objection sustained.

Mr. Chambers: Well, you said it was a guess, let's see if it is. You said pure guess. Read the statement of the Master. 37947

(The statement referred to was read by the stenographer.)

Mr. Chambers: Now, I ask if it is a guess.

The Master: I won't take it, I say it is a guess.

Mr. Chambers: What right have you to say that when you don't know how he did it.

The Master: Yes, I do. He just told us how he did it.

Mr. Chambers: No, not in full.

The Master: As I understand it, take a plot with an area 100 by 100.

Mr. Chambers: Yes.

The Master: That you contend only 80 by 100 was used or useful, and the whole plot cost $100,000, Mr. Maltbie says I did not take it on the basis of an apportionment of area, I took it on an apportionment of area plus other factors I have assumed, I have inferred from the figures that I see what that parcel cost as to the 20 feet and as to the 80 feet. Now, I say that is a pure guess, and I won't take his statement.

37949 Mr. Chambers: I want to ask him if it is a guess.

The Master: I won't allow you.

Mr. Chambers: Exception.

The Master: It is my conclusion from what he says he did.

Q. Is this table correct?

Mr. Ransom: I object as incompetent.

The Master: Objection sustained.

Mr. Chambers: Just a minute now. Both of you are so quick on your feet, team work, I am going to ask him if it was correct, using the information that you found in the case, the testi-

37950 mony already in the case, is it correct, in your opinion and your judgment as showing the additions to cost of land 1906 to 1918 of these parcels designated on the table.

Mr. Ransom: Previous objection renewed.

The Master: Previous ruling renewed.

Mr. Chambers: Exception. I offer the table in evidence, being Table No. 3.

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. Chambers: Just a minute, you are both so quick. I am not going to eat up this Gas-

Company here, both of you are so ready to one object and the other sustain, you do not give counsel a chance to ask the questions.

Q. Now, is Table 3—

Mr. Chambers: And I might say that this is the first time in my experience I have had both the Court and counsel one object and the other sustain the objection before I asked the questions, and I except.

Q. Now, I ask you, Mr. Maltbie—

The Master (interrupting): Now, Mr. Chambers, before you go any further, I do not want 37952
anything in the nature that you have just said repeated again in the course of this case.

Mr. Chambers: Well, I say it respectfully.

The Master: The objection was made when Judge Ransom assumed you had finished your question, and the Master's ruling was made when I assumed you had finished your question, and you proceed and ask your questions, and do not make insulting remarks in the course of this case again.

Mr. Chambers: Now, I say it respectfully, and it appeared to me so.

The Master: Well, it was impertinent both in 37953
its manner of statement and in the substance of what was said.

Mr. Chambers: I do not see—if the Master says he thought I was through, then I apologize to that extent to him, but it did seem to me—

The Master: Apology accepted. There is no necessity for this kind of statement.

Mr. Chambers: It did seem to me there was a plan on foot not to let me ask the question.

The Master: Now, you are talking impertinent again.

Mr. Chambers: Well, then, I say whatever I say with respect, and it is said in good faith. Read the question.

(The stenographer states the question referred to was an offer of a paper.)

Mr. Chambers: Now, you see I don't know what the question was I had in mind.

Q. Do you know of any way from the testimony in this case, in which these figures or these costs are shown on Table 3 may be found without making some apportionment as you have done, of the whole prop-
37955 erty as shown in Tables 117 and 118 to that part which is shown in this table?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Chambers: Exception.

The Master: And before you ask another question, Mr. O'Brien, I notice Mr. Bemis is here. Do you intend to call him as a witness.

Mr. O'Brien: I do, yes, sir.

The Master: Then you had better keep him here.

Mr. Chambers: Now, I ask that Table 3 be marked for identification.

37956 Mr. Ransom: Objected to as incompetent, immaterial and irrelevant.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Now, have you prepared another table designated for convenience Table 4?

A. I have.

The Master: Of course you understand, Mr. Chambers, that any of these tables that will in any way aid the Master in analyzing the testimony, will be accepted for that purpose, whether they are in evidence or not.

Mr. O'Brien: May I suggest that the Master take subject to explanation, and then strike out the testimony if it does not conform to the rules of evidence?

The Master: No, that means a lot of cross-examination if I let it in, and I will try to save time on it.

Mr. O'Brien: Well, it may be—in other words, if the factors are in the record and there is a computation made of it, and if there be any element of judgment used, it would be within the witness's qualifications already shown on the rec- 37958
ord—

The Master: No, it would not be.

Mr. O'Brien: Well, if we had that explanation, then you could strike it out from the record if it did not meet your ideas as to the rules of evidence.

The Master: By no stretch of the imagination has Mr. Maltbie qualified as an expert on the value of land in 1906 or in prior years or since.

Mr. Chambers: I do not offer him as such, I have not claimed—

The Master: I know you don't. Go ahead.

Mr. Chambers: I claim he is a qualified ac- 37959
countant though, as has been shown by his experience.

Q. Now, Table No. 4, Mr. Maltbie, what does that show?

A. It shows retirement of land from 1906 to 1918.

Q. And where did you get your data from from which to prepare the table?

A. Well, the parcels of land selected are the parcels shown in Defendants' Exhibit AA-126, and the dates of retirement are taken from the testimony of Mr. Hine. The amounts are taken from Table 2.

The Master: Which I have refused to receive in evidence.

The Witness: Yes.

Q. Now, it is correct, the table?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception.

The Master: The table in the nature of things cannot be received if I have ruled out Table 2 on which it depends.

Q. Now, it shows, does it, the retirements as to
37961 the different parcels, parcel by parcel?

A. It does.

Q. And does it state the year in which the property was retired?

Mr. Ransom: Objected to.

A. It states the date on which it was retired, the month and day of the month and year.

Mr. Ransom: I move to strike out that answer, it is not a matter of retirements at all, it is a question of when Mr. Hine thinks it ought to have been retired or something.

Q. Now, Lot 17, Block 689, as shown on Map 2, was retired, was it, on December 31, 1913, according
37962 to the books of the company?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. When was Block 690, Lot 12 as shown on Map 3 of Defendants' Exhibit VV-126 retired, if you have ascertained?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. When was Lot 11, Block 691, Map 3, retired?

Mr. Ransom: Objected to on the same grounds.

The Master: Objection sustained.

Mr. Chambers: Exception.

Q. Block 715, Lot 51, as shown on Map 21 of Exhibit AA-126 when was that retired?

Mr. Ransom: Same objection.

The Master: Objection sustained, and I suggest counsel ask no more questions on that subject on this line.

Mr. Chambers: Exception. That is you won't let me show by Mr. Maltbie who has made an examination when these various blocks and lots were retired? 37964

The Master: No. Mr. Maltbie has not made an examination, he has had men make them for him, and their testimony is already in the record.

Mr. Chambers: Exception.

Q. Now, have you prepared a table designated Table 5?

A. Yes, sir.

Q. What does that table show?

A. That shows the average cost of the land shown in Defendants' Exhibit AA-126, year by year from 1906 to 1918, and also includes one parcel not shown in Defendants' Exhibit AA-126.

Q. And where did you get your information from, 37965
the data for that table?

A. Well, the basic information was taken from Tables 2, 3 and 4.

The Master: Which I have refused to take into evidence.

The Witness: Correct.

Q. Is that table correct, using the information which you have stated?

Mr. Ransom: Objected to, incompetent, irrelevant and immaterial.

The Master: Objection sustained.

Mr. Chambers: Exception.

Now, will the Master state the reason for this last ruling on this table?

The Master: Because it depends on other tables which I have refused to take into evidence, and cannot by any possibility be a basis for this table.

Mr. Chambers: And your reason for ruling on No. 4?

The Master: I do not know whether I have already given it. If I have not, I think it sufficiently appears.

37967

Mr. Chambers: Exception.

The Master: The deductions from the evidence can be presented in the form of argument, and if I agree with the deductions to be drawn from the testimony in the case, I will do the calculating.

Q. Now, have you prepared another table known as Table 7-a?

A. I have.

Q. What does that show?

A. That shows the average assessed values of certain parcels of land, 1906 to 1918.

37968 Q. And what data did you use in preparing the table?

A. Well, I used the data in Defendants' Exhibit XX-126 and the assessed values as shown in the evidence.

Q. And is the table correct, using those as the basis of it?

A. It is.

Mr. Chambers: I offer the table in evidence, being Table 7-a.

Mr. Ransom: Objected to as immaterial, irrelevant and incompetent.

37969

The Master: That is a pure calculation, is it, or is that based on deductions from the testimony, too?

The Witness: It involves only this additional factor, or these additional factors, in the first place, it assumes in making the average, that the payments for certain assessments were scattered throughout the year, and they were not made at the very end of the year, and it takes out the property as shown in Defendants' Exhibit AA-126 at the times testified to by Mr. Hine. Beyond that it is a mathematical computation.

37970

The Master: Let us see it.

Mr. Ransom: Average assessed valuation year by year, purely theoretical.

The Master: I notice that this 7-a purports to be compiled from Tables 6 and 7.

The Witness: That was, but the figures are taken directly for convenience from Table 6 and 7.

The Master: They are two tables I have ruled out, are they?

The Witness: You have simply said they were tabulations made from the testimony.

37971

The Master: Yes, and then this is a tabulation made from them.

Mr. Chambers: You have not ruled them out yet, any more than—

The Master: I have not taken them in.

The Witness: It could have been made directly from the testimony by going over each one of the pages.

The Master: Well, it is no different than 6 and 7 in substance.

The Witness: Except that the figures, even if you used 6 and 7, would involve the taking out

of the parcels the putting in of other parcels in that case as they were retired or should have been retired according to the testimony of Mr. Hine, and as they were taken in by the company according to its own books. That is in the case of the Kingsbridge Holder, for instance, which was acquired originally in March, 1910, as I recall, 5/6 of the value of that property is taken for that year, that is the portion which Senator Boylan testified to was the part of the 450 feet to the south, $64,312, as I recall it.

37973 The Master: Oh, I guess I better not take it as a tabulation. I can use it in considering the testimony, rather than taking it as an exhibit.

Mr. Chambers: Then the objection is sustained?

The Master: Yes.

Mr. Chambers: Exception. And will you state what are those grounds on which you refuse it?

The Master: I am sustaining it because I see no necessity of having it in evidence.

Mr. Chambers: Exception.

The Master: Disregarding any other reason

37974 why it may be improper, matters of this kind can be presented to the Master in form of argument, and I can check it up. We have got too many tables in here now.

Mr. Chambers: That is all for the present.

The Master: Are you through with Mr. Maltbie now?

Mr. Chambers: No, not yet.

The Master: Well, then, I won't force any cross-examination until you announce that you are through with him.

Mr. Ransom: Are there more tables?

The Master: I don't know. Next witness.

JAMES B. WALKER, a witness in behalf of the defendants, being first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. CLARK:

Q. Mr. Walker, what is your position with the Public Service Commission?

A. Secretary.

Q. Are you in charge of the files of the Public Service Commission?

A. Yes.

Q. Have you produced the file in Case No. 2,235, entitled, "In the Matter of the Hearing on the Motion of the Commission as to the Standard for Measurement of the quantity and power of gas manufactured, distributed or sold by gas corporations for the First District and the rate or charges for such gas service based upon such standards"? 37976

A. Yes, I have that here.

Q. Do your files show that there was an order issued on the 13th day of October, 1917, fixing the heating standard for gas?

Mr. Ransom: I object, the order is in evidence, incompetent.

The Master: Is the order in evidence?

Mr. Ransom: Yes, put in by Mr. Chambers months ago. 37977

The Master: It is in evidence. Objection sustained.

Q. Can you state from your files, whether the Consolidated Gas Company—

Mr. Chambers: Exception. I don't know just what that was, but I take an exception.

Q. Can you state from an examination of your files whether there is any record of the Consolidated Gas Company, complainant in this action, having accepted the order of the Commission in that case?

A. I could not find any.

37978 Q. You have searched the records to ascertain?

A. Yes.

Q. And there is no record of any—

A. (Interrupting.) No record of any acceptance.

The Master: The witness says he can't find any.

Mr. Clark: I would like to have this file marked for identification as coming from the files of the Public Service Commission.

The Master: Not necessary.

Mr. Clark: For the purpose of offering some

37979 letters from it.

The Master: Not necessary to mark anything for identification. Any letters that you want of the Consolidated Gas Company in the nature of an admission against interest relevant or pertinent to this issue, you can offer.

Mr. Clark: That is all, Mr. Walker.

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WILLIAM R. BIRDSLEY, a witness in behalf of the defendants, being first duly sworn, testified as follows:

37980 DIRECT EXAMINATION BY MR. CLARK:

Q. What is your position with the city government?

A. I am acting chief gas examiner of the department of water supply.

Q. What are your duties?

A. They consist in supervising the testing of the gas supplied to the various testing stations.

Q. How long have you held that position?

A. I have been acting chief gas examiner since 1913.

Q. What were your duties prior to that?

A. Prior to that I was gas inspector from 1906 to 1913.

Q. Did you from 1906 to 1913, have charge of the gas inspection in the city?

A. I did not have charge of the gas inspection, I had charge of the various stations at various times.

Q. Where are the gas inspection stations of the city located?

A. In Manhattan there is one located at the corner of Grand Street and The Bowery, one located at 200 East 79th Street. 37082

Q. What gas is supposed to be tested at the Grand Street station?

Mr. Ransom: Objected to, incompetent.

The Master: Objection sustained.

Q. How many mains do you tap for tests for gas at the Bowery station?

A. I do not know as I could answer that question that way. We have—

Mr. Ransom: I object to it then.

The Master: The question is, how many mains do you tap, if you know?

The Witness: We take gas presumably from five mains. 37083

The Master: I don't want "presumably." How many mains do you tap?

The Witness: There are five mains running into the building.

The Master: You tap those five mains?

The Witness: We tap the five mains or risers.

The Master: All right.

Q. Whose mains are they, if you know?

The Master: If you know of your own knowledge.

A. When the mains were installed and the risers run into our building, we were told—

37984 William R. Birdsey. Direct.

The Master: Who is "we"?

Mr. Ransom: I object to what they were told.

A. The department of water supply.

The Master: What were you told?

The Witness: I was informed by the gas engineer who supervised the—

The Master: Who was told by somebody else?

Mr. O'Brien: I object to that, your Honor. Here is an official testing station where tests have been made by the City right along for years,

37985 concerning the results of which test notices have been sent to the Consolidated Gas Co. Now, the witness is going to tell you if he is permitted without interruption, that they are making the tests there of the Consolidated Gas Company's gas.

Mr. Ransom: I object to the statement of counsel.

Mr. O'Brien: Now, what do you object to it for?

The Master: I thought you were addressing me, Mr. O'Brien.

Mr. O'Brien: Won't the Master protect me

37986 from the interruptions of counsel?

The Master: I will, if you will just go on and talk to me and pay no attention to Judge Ransom's interruptions.

Mr. O'Brien: Now, I submit that the witness should be allowed to tell how the tests are made, what the mains are, the gas from which is tested, and the *modus operandi* of connecting the tests and the results that have been produced, and which are recorded in the official records of the City.

The Master: I will all in due form. I won't let him say what somebody else told him.

Q. Do you test the gas of the Consolidated Gas Company?

Mr. Ransom: Objected to, incompetent.

The Master: Objection sustained, unless the witness can say of his own knowledge that he knows that one of those mains is a Consolidated main.

Mr. Ransom: I think the witness—

Mr. O'Brien (interrupting): Exception.

Mr. Ransom (continuing): Is under a misapprehension or something in saying that five mains run into that building. There aren't any 37088
mains run into that building.

The Master: Five risers, he said.

Q. Whom did you pay for the gas that you tested?

Mr. Ransom: I object to that as incompetent, irrelevant and immaterial.

The Master: Personally?

Mr. Clark: The City of New York, whom he represents.

The Master: Does he pay anybody himself? Do you pay anybody?

The Witness: I do not.

Q. Do you see bills that are rendered for the gas that is used there? 37089

Mr. Ransom: I object to that as incompetent, irrelevant and immaterial.

The Master: I will let him say whether he sees the bills.

A. I do not.

Q. What is the system of testing the gas at these two stations?

Mr. Ransom: I object to that as immaterial and incompetent.

The Master: Objection overruled.

A. We test the gas for candle power, pressure, and chemical impurities. The common chemical impurities

that we test for are sulphur, ammonia, and sulphuretted hydrogen.

Q. How are the tests for candle power conducted?

Mr. Ransom: I object to the testimony of this witness, he doesn't do it personally. The testimony of a mere course of business is not probative here.

Mr. O'Brien: These testers—your Honor, in order to save the time of the Court—several of the testers are here. Mr. Birdsley has charge of that branch of the department of water supply,
37991 gas and electricity. All the testers in the City are under his supervision. He has had charge of that for years. Of course, if the time of the Court were taken up he could go into his experience with the testing machines, the testing apparatus, the method of recording the tests, the action taken by the department as officially recorded, the sending out of the records of the tests to the several companies; and why there should be objections made by counsel as to the records of the department is pretty hard to understand, or to the methods of making the tests.

As I understood, I do not think the Master in-
37992 tended to be hypercritical about the matter, but the way you put the question to the witness would seem to indicate that you want him to say whether he actually knew that the gas come through the pipe belonging to a particular company.

By Mr. O'Brien:

Q. Mr. Birdsley, the gas pipes that enter into the testing stations are metered, have meters on them?

The Master: One minute. This is Major Clark's witness and Major Clark is examining.

(Question read as follows):

"Q. What is the system of testing the gas at these two stations?"

By the Master:

Q. Since 1913, you have been in charge, have you?

A. I have.

Q. You have not tested yourself?

A. I have, on various occasions tested the gas and checked up the men.

Q. Have you seen the men do any testing?

A. I have.

Q. You have watched them do the testing?

A. I have.

Q. How frequently? 37904

A. Very frequently.

The Master: I will allow him to state.

Mr. Ransom: Exception.

Q. What is the method that you have observed and that you yourself have used and that you have seen other men use?

A. The method of making candle power tests, the tests are made on what we call a Sugg-Letheby Photometer, in a modified from.

The Master: Next question, Major.

By Mr. Clark:

Q. How often are the tests made?

A. Daily. 37905

By the Master:

Q. At each station?

A. At each station, on each gas.

Q. On each riser you mean?

A. Each riser.

Q. More than once daily or just once each day?

A. In some cases two tests are made, sometimes more tests than that.

By Mr. Clark:

Q. From your knowledge of the testing of gas is that the proper method to test candle power?

Mr. Ransom: I object to that as incompetent. The statute prescribes the only basis that is material. It is not a question of general propriety.

The Master: What does the statute say about it?

Mr. Clark: It says 22 sperm candles, at least a mile from the holder.

Mr. Ransom: From whose holder?

Mr. Clark: The holder.

(The Master examines the statute.)

The Master: That objection will have to be
37°007 sustained.

Mr. Clark: There is nothing in the law that prescribes the exact method of making these tests.

The Master: That may be, but I will not let this witness say that the method is the method prescribed by law.

Mr. Clark: He didn't say that.

The Master: You asked him whether it is the proper method.

Mr. Chambers: Whether it is a proper method.

The Master: It calls for a conclusion of the witness.

37°008 Mr. Clark: This is an expert opinion.

The Master: Objection sustained.

Mr. Clark: Exception.

Mr. Chambers: Exception.

By Mr. Chambers:

Q. Is it a well known and well recognized method of testing for candle power?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Chambers: Exception.

By Mr. Clark:

Q. What is the system of this photometer, how does it work? Explain that in detail.

37999

Mr. Ransom: I object to that.

The Master: I will let him say that. They may show that it does comply with the statute.

A. The photometer, the component parts of a photometer are placed on a table approximately 8 to 10 feet long. The gas first runs through a dry governor which cuts down the pressure to a working pressure of about an inch and a half. The gas from there runs through a meter, which is what we call a clock meter, giving the consumption of gas in hundredths of a cubic foot, and also the time of the consumption of the sperm is recorded by the clock. The gas passes from there through what we call a wet governor, which is used to cut down any variable pressures which may be caused by the turning over of the drum in the meter. From there it passes on to the burner. The gas in passing through the meter is regulated to a consumption of 5 cubic feet an hour, and the test is made under those conditions. The meter is also provided with a thermometer to test the temperature of the gas as it passes through, so that corrections can be made in regard to temperature.

38000

By the Master:

Q. At what rate of spermaceti per hour is the burning of the gas?

38001

A. I was coming to that.

Q. I thought you had finished?

A. I was taking one end of the table and going on with it. This is all located on one end of the table. At the other end of the table we have a candle balance, which is designed to hold two candles. The candles which are used are of a special make, manufactured in England and imported here through the American Meter Company. These candles are made under certain specifications as regards the spermaceti, and must burn approximately 120 grains per hour. Between

38002 William R. Birdsley, Direct.

the two sources of light, one known as the gas flame, to be under observation, and the other the candles, there is a calibrated bar which is calibrated according to the inverse squares, and shows on the length from the center towards either end calibrations indicating the candle power. The center of the bar is placed exactly 30 inches from each source of light. Each source of light is exactly 60 inches apart, these points having been determined by measuring off on the table, an metallic plates are screwed on the table to keep those two points permanent. On the bar is a
38003 sight box holding a disc parallel with the two lights. At an angle of about 5 degrees to the axis of the disc there are two mirrors which reflect the disc. The operator, looking into the sight box, can see the reflection of the disc in the two mirrors. He then moves it backward and forward on the bar until the star on the disc appears of equal intensity in both mirrors. When that point is reached he looks at the bar, and from the bottom of the sight box there is a pointer which is exactly below the disc, and that pointer indicates the observed candle power of the gas.

Q. There is just one human element, one human factor in it, and that is whether the star is of equal in-
38004 tensity?

A. Yes, that is left to the judgment of the operator.

Q. That is the only human factor?

A. Yes, sir.

By Mr. Clark:

Q. Are there any corrections made after the tests?

A. Shall I continue?

The Master: Yes, describe the process.

A. During the test 10 observations are made at approximately one minute apart. These observations are then added up and averaged. The candles meanwhile will have burned between 9 1 2 and 10 1 2

minutes, and during that time the candles should have consumed sperm at the rate of 120 grains per hour.

Mr. Ransom: I move to strike that out. I don't believe the witness is qualified to say that.

The Master: I will let it stand.

Mr. Ransom: Exception.

A. (Continued.) After ascertaining how long it took to burn the sperm, we take the time and proceed with our regular calculations. The gas is now corrected for temperature and barometric pressure. 38006

Q. How is that done?

A. We have tables.

Q. Who makes the tables, where do you get the tables?

A. We have regular logarithmic tables which we use. Those were prepared by our former chief gas inspector, Dr. E. G. Love. Corrections are also made for the consumption of sperm.

Q. How are those corrections made?

A. Also by means of logarithmic tables.

Q. That is, you compare the actual consumption of sperm with the amount that should have been consumed if the candles had actually burned at the rate of 120 grains per minute? 38007

A. That is it.

Q. And you correct your observed candle power in accordance with that if there is any difference?

A. That is true.

The Master: In other words, the candle does not always burn at the required rate?

The Witness: No, sir.

Q. Are you through?

A. The result of the correction is then called the corrected candle power of the gas, and is so reported.

Q. Have you ever seen gas tested anywhere except in your own station?

A. Yes, I have seen it tested in the Gas Company.

The Master: Under what statute is this test made?

The Witness: Under Chapter 730.

The Master: Of what?

The Witness: Of the Laws of 1905.

The Master: Has anybody got that here? If not, send upstairs for it, the Session Laws of 1905.

The Witness: That is the City Charter.

Mr. Clark: It is the same as that that you
380009 have there, I think.

Q. The statute that you speak of, is that the City Charter?

A. Yes.

Mr. Clark: I think it has the same provisions as that one you have there.

The Master: The City Charter?

Mr. Clark: The amendments to the City Charter.

The Master: What has the City Charter got to do with this? Go ahead, Major. I have been anticipating an offer which you are probably going to make, and I was wondering how far I
380010 could go with it. Go ahead with your questions.

Q. Where have you seen gas tested except at your own station, Mr. Birdsley?

A. I have seen testing done at the Gas Company's works and testing stations.

Q. What Gas Company?

A. Consolidated Gas Company.

Q. What works?

A. 21st Street works and 99th Street works; also at the Consolidated Testing Stations located at Grand Street and the Bowery, and at 79th Street.

Q. What system do they use?

By the Master:

Q. The Consolidated Gas Company has testing stations of their own?

A. Yes, sir.

Q. At the same places where you have?

A. Yes, sir.

Q. In the same building?

A. Usually in the same building.

By Mr. Clark:

Q. What system do they use?

Mr. Ransom: I object to that.

The Master: Objection overruled. 38012

Mr. Ransom: Exception.

A. Practically the same as we.

Q. In what particular does it differ from yours, if any?

A. There is really no difference.

Mr. Ransom: I move to strike out the answer. The qualification of the witness is not in any respect shown, and it is immaterial.

The Master: Motion denied.

Mr. Ransom: Exception.

Q. Do you have meters on the risers from which you take gas?

A. We have. 38013

Q. Whose meters are they?

Mr. Ransom: I object to that as immaterial, whose meters they are.

The Master: Objection overruled.

Mr. Ransom: The witness does not know, unless they are City meters.

The Master: Objection overruled.

Mr. Ransom: Exception. How can he state whose meters they are?

Q. You may answer.

A. At Grand Street we have three meters, the indexes of which are taken by the Consolidated Gas

Company indexers; one meter, the index of which is taken by the New York Mutual indexer; one meter, the index of which is taken by the New Amsterdam indexer—and so entered on the books.

Mr. Ransom: I move to strike out the answer as incompetent, the witness is not qualified to state whose indexes they are. He does not know whose indexes they are.

By the Master:

Q. How can you tell, by badges or some other insignia, uniforms or something else?

38015 A. The indexer comes in and states that he wants to look at the Mutual index.

Q. How do you know he is entitled to look?

A. He has a company cap on and an index book.

The Master: I will assume he is the proper man.

Mr. Ransom: Exception.

By Mr. Clark:

Q. How about it at 79th Street?

A. At 79th Street we have three meters, the indexes of which are taken by the Consolidated indexers; one meter the index of which is taken by the Standard Indexer; and one meter the index of which is taken

38016 by the New Amsterdam Indexer.

The Master: Let us get right down to it. I see that Chapter 735 of the Laws of 1905, covers this situation. Have you the sworn reports?

Mr. Clark: I have the books here.

The Master: Have you the sworn reports?

Mr. O'Brien: We have the testers here, the men who made the tests, all except one man, and he is on his way, the men who made the tests from day to day.

The Master: Where are the sworn reports which Chapter 735 require?

The Witness: The daily sworn reports are not here.

The Master: Where are they?

The Witness: They are at my office on file, regular official files.

The Master: You had better get those.

Mr. Ransom: This chapter applies only to gas sold to the City.

The Master: I beg your pardon, it says, "or to any consumer therein." I will let you offer in evidence the sworn statements, if you produce them. 38018

Mr. Clark: I have a tabulation of those here.

The Master: No, I won't take it, not until I have the reports in anyhow.

Mr. Clark: I thought possibly we could save time by offering them subject to—

The Master: Unless Judge Ransom is willing to do this, to waive the production of the original reports, and to stipulate that these are correct tabulations.

Mr. Ransom: I certainly will not.

Mr. Chambers: Well, we don't ask him to.

The Master: Go ahead, Major.

Mr. Clark: I have here the original books of entry in which these reports are incorporated. 38019

The Master: No, I find nothing in the statute which requires the keeping of books. I will not consider the books.

Mr. Clark: Then there is nothing that I can offer except the tabulations.

The Master: You had better reserve them. There is a statute that requires the officials to make sworn reports daily, and those I will take.

The Witness: That will take a little time. I will telephone down and get them brought right up.

The Master: All right. Go on, Mr. O'Brien, with your witness: Is there any other witness to be called?

Mr. O'Brien: Well, your Honor, about the testers, those who made the actual tests prior to the sworn statements, if you are going to receive the sworn statements without preliminary proof, of course, we can dismiss these witnesses; but they are here, the men who actually made the tests. They are civil service appointees, and graduates in chemistry, and can give you all the
38021 mechanism, so there can be no doubt about the accuracy of these tests.

The Master: Go on and call them then.

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Samuel Hirschewitz, called as a witness on behalf of the defendants, being duly sworn, testified as follows:

Direct-examination by Mr. Clark:

Q. What is your position?

A. Gas inspector in the department of water sup-
38022 ply.

Q. Under Mr. Birdsley?

A. Yes.

Q. Are you a chemist?

A. Yes, sir.

Q. What education have you had?

A. I had a preliminary chemical training in the high schools of the City, and took a full six years' course, and post-graduate course in Cooper Union, graduating with the degree of bachelor of chemistry.

Q. How long have you been with the department of water supply?

A. Since January, 1906.

Q. As a gas inspector

A. As a gas inspector.

Q. Where have you inspected?

A. I have inspected during the time I have been in the department at practically every station within the Greater City. For the last six years I have been stationed at 200 East 79th Street.

The Master: How far back do you go with this proof as to the tests?

Mr. Clark: I think only two or three years.

The Master: Then Mr. Hirschewitz completely covers 79th Street for the last three years. 38024

The Witness: Yes, sir.

The Master: Made all the tests there?

The Witness: With the exception of a few Jewish holidays and the vacation period when I was excused.

Q. What machine did you use at 79th Street?

A. Photometers, the same as described by the last witness, a modification of the Sugg-Letheby Photometer.

Q. Are you familiar with the gas testing at other places besides the City testing stations?

A. I have from time to time made it my business to look into the matter of gas testing with the determination of improving my knowledge, and I have had occasion to visit various gas companies and see their methods of testing. 38025

Q. What system do you find in use?

A. Practically the same as the system employed by the City.

Mr. Ransom: I move to strike out the answer, "Practically the same."

The Master: I will let it stand.

Mr. Ransom: Exception.

Q. What differences are there?

A. Why, as I regard the essential part of gas testing, the use of the photometer, the use of the candles as a standard, the use of a meter to register the amount of gas passing through—in that respect there are no differences.

Q. Where do the differences lie?

A. Why, the differences may lie as to when the meter may be at one end of the photometer or at the other end; they may have a different form of candle balance.

Q. So far as you know is there any improved form
38027 of measuring gas, is there any improvement in the art of testing gas that is not used in the City testing stations?

Mr. Ransom: I object to that as immaterial and incompetent.

The Master: Objection overruled.

Mr. Ransom: Exception.

A. So far as I know there is not.

Q. Will you state what this book is that I hand you?

The Master: Don't waste time on those books. I am not going to take the books. We are going to have your sworn reports, so what is the use
38028 of wasting time on the books.

By the Master:

Q. Did you conduct the tests as the last witness described?

A. Yes, sir, daily tests.

Q. In just that form?

A. Yes, sir.

Q. And following those tests did you make up a sworn report?

A. Yes, sir.

Q. Under Chapter 735 of the Laws of 1905?

A. Yes, sir.

Q. Whom did you swear to it before?

A. A notary public.

Q. Did you do that every day?

A. Every day.

Q. As soon as you were through with the test you would make up a report?

A. Yes, sir, on a form provided.

Q. And swore to it?

A. And took it before a notary public or commissioner of deeds.

Q. And sworn to it?

A. It was sworn to and mailed to the office of the 38030
chief, accompanied by the actual testing sheets.

Q. Why do you mail it, why don't you take it there?

A. Because it is more convenient to mail it than to take it, it is a saving of time.

Q. Do you have anything else to do except these mornings working on the tests?

A. We have two stations. Our particular charge is 200 East 79th Street, and Rockaway Beach.

Q. So when you get through at 79th Street you go to Rockaway Beach?

A. Yes, sir, and we are subject from time to time to emergency calls.

38031

Q. At any rate, you mail them to the office?

A. Yes, sir.

Q. And that is last you know about them?

A. That is the last I know about them.

The Master: All right, cross-examine him now, Judge Ransom.

Cross-examination by Mr. Ransom:

Q. How many candles do you use?

A. Two candles, or rather one large candle cut in half.

Q. Which is it?

A. In actual burning, two candles, but we are supplied with a large candle which is cut in half to make two candles.

Q. How long have you been doing that?

A. Well, as far as I can recall, for the last three or four years; I don't remember the exact date.

Q. What did you do before that?

A. Used a smaller candle, and used it as such.

Q. What records do you make of the temperature of the room?

A. We have a thermometer at the 79th Street Station, a thermometer which is not attached to the photometer itself, put in there for the purpose of determining the temperature of the room.

38033

Q. How do you maintain the temperature of the room?

A. The station itself is heated with a steam heating plant. If the heat is not sufficient we try to bring it up to the normal temperature by burning gas at that particular station.

Q. Where do you burn gas?

A. We either burn the gas in the photometer itself, or burn it on a jet, or burn it with a Bunsen burner.

38034

Q. Do you record the temperature of the room before you take the test?

A. No, sir.

Q. Has this thermometer been calibrated by the Bureau of Standards in Washington?

A. I don't know that it has.

Q. Do you make the corrections of the observed candle power according to temperature, you personally?

A. In my report I do.

The Master: What do you mean by "in your report you do"?

The Witness: Why, assuming a case where the temperature of the gas is 62, the normal temperature of the gas is 60, an allowance is made for the 2 degrees increase of temperature.

The Master: Do you calculate that?

The Witness: There is a table which has been calculated for each degree of temperature.

The Master: Well, do you figure it according to that temperature?

The Witness: We do.

Q. Do you make the readjustments of the observed candle power likewise according to barometric pressure? 38036

A. We do.

Q. Do you personally?

A. Oh, yes, in the same fashion as I do for temperature.

Q. Who determines how much has been the consumption of sperm?

A. Why, that is determined by weights that are placed on the candle balance. On the completion of the burning of 40 grains the candle balance drops, which point we watch, and the clock is shut off, and from those factors is determined the correction for sperm. 38037

Q. How long does it take you to take a test?

A. Why, the actual test takes 10 minutes.

Q. Exactly?

A. Between 9 1 2 and 10 1 2, to be exact.

Q. How long do you burn the gas before you test?

A. It all depends on conditions. If we are burning out the gas at other places than the photometer itself, half an hour we consider sufficient. If not, we take a longer period.

Q. How about your barometer—is that tested by the Bureau of Standards or any public authority?

A. It is a standard barometer; I found it in the station.

Q. How often is the apparatus, the photometer itself, inspected and tested and regulated by any one other than yourself?

A. The last overhauling of the apparatus itself took place about three years ago.

The Master: How about the last testing of it?

38039 The Witness: The last testing?

The Master: Of the apparatus, to see that it was accurate.

The Witness: It is tested every day before the gas testing is commenced.

Q. Have you any apparatus known as bleeders to draw off the gas before you start the test?

A. Not in our station, no, sir.

Q. Is there in any of the stations?

A. We have been informed, and we know it to be a fact, that in the Gas Company's station which is located in the station, there are a series of so-called bleeders or burners, and since we start our test usually

38040 after the company starts theirs, we take that into consideration.

Q. How do you take it into consideration?

A. We take into consideration the fact that the gas is being burned off and we are getting a fresh supply.

Q. Are you on the same meters with the Gas Companies?

Q. Well, on the same lines?

Q. Not on the same meters?

A. The same lines.

Q. And you have no bleeders to insure that the gas which you are getting is fresh gas rather than gas which has remained from the previous test?

A. From our experience—

Q. Just answer the question.

Mr. O'Brien: He is answering it.

The Master: No, he is not.

Mr. Clark: He says they have no bleeders.

(Question read.)

Mr. Clark: I object to the question.

Mr. Chambers: I object to it.

The Master: Objection overruled.

Mr. Clark: Exception.

Mr. Chambers: Exception.

A. I am sure the gas is not the gas from the last 38042
test, because immediately after the conclusion of the previous test new gas is turned on.

Mr. Ransom: I move to strike out the answer as not responsive.

Mr. Chambers: I object to that.

The Master: The motion to strike it out as not responsive is granted.

Mr. Chambers: Exception.

Q. You have no such bleeders?

A. We have no bleeders.

By the Master:

Q. What are bleeders?

A. I never heard the term before. 38043

Q. What are you talking about, then?

A. Why, I assumed that Judge Ransom meant exits from which the gas is blown off in order to allow a fresh supply to be tested.

Q. That is what you have been talking about when you say you haven't got it?

A. Exactly. We know they are attached to the line.

Q. If it is not a fresh supply of gas does it make much difference in the test?

A. It does.

Q. Is it more likely that the candle power will be up or down in that case?

A. It is more likely to be down.

Q. How much?

A. It depends on the temperature and the location of the lines.

Q. Would it run down as much as 2 candle power?

A. Under certain conditions it would run down more than that.

Q. More than 2 candle power?

A. Yes.

38045 By Mr. Ransom:

Q. What is the nearest holder to 79th Street?

A. 61st Street and East River, and 99th Street and East River, or First or Second Avenue, whatever it is.

Q. Is this 61st Street holder a Standard holder or a Consolidated holder?

A. I have no information as to which it is.

Q. You don't know from what holder this gas comes?

A. I know from what meter it comes.

The Master: Well, nobody can tell that, can they?

38046 Mr. Ransom: I don't think so.

Mr. Chambers: Nobody can. Mr. Woods said you couldn't tell.

The Master: That is what my understanding of the record is that there isn't any gas at any one of these testing stations that can be identified as the gas from any particular company.

Mr. O'Brien: You are assuming, of course, that if it is in the transfer system it is any company's gas?

The Master: Yes.

Mr. Chambers: Any of these allied companies.

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Mr. O'Brien: They are all drawing from a common source of gas.

The Master: Yes, isn't that your understanding, that no particular gas can be identified?

Mr. O'Brien: That seemed to be Mr. Woods' testimony.

The Master: Do you say it can be identified?

Mr. O'Brien: I am saying that we have City tests, that the labels were put onto the pipes by the Gas Company, that they put the meters on those pipes of the particular companies, that they have subscribed to the proposition that it is the gas of this company, that they have received no- 38048
tices of these tests—

The Master: I don't get your point. If the Consolidated Gas Company testifies that the gas is mingled so that the gas ought to be uniform in all of its branches and in all of these testing stations, I don't quite get your point.

Mr. O'Brien: Well, the point is this, that the gas companies are parties to the proposition that there is a pipe, and it has got the gas of the Consolidated Company; that another is the gas of the New Amsterdam Company; that the connections are made with the mains of the respective companies; the meters are put in there to measure 38049
gas coming through each main. The notices of violation go out from the department to these respective companies as to the tests of gas, with no complaints against the accuracy of those tests charged up to the particular companies, or accredited to the particular companies.

The Master: What I am trying to get from you is whether you contest the proposition that the gas cannot be identified, or whether you insist that it can be identified?

Mr. O'Brien: I have nothing to say on that, your Honor.

The Master: Then don't say anything.

Mr. O'Brien: The proofs of the case stay as they are. At this point we are telling you how they test gas.

The Master: I am trying to find out what you say the record shows, according to your understanding of it.

Mr. O'Brien: The last day that Mr. Woods was on the stand you heard his statement.

38051 The Master: I am trying to find out what your claim is. Can't you tell me what your claim is?

Mr. O'Brien: We are going in on our record. The record stands as it is, with the additional testimony yet to be offered.

Q. Are you reporting tests of Equitable Gas Light Company gas at 79th Street?

A. Not under that name.

Q. Or any name? Haven't you reported during the past few years tests of what you call Equitable Gas Light Company gas?

A. No, sir.

38052 Q. Haven't made up any statements of that?

A. No, sir.

Q. Or any reports?

A. No, sir.

Q. Have you reported gas from 44th Street during the past two or three years?

A. I have.

Q. And still are?

A. Still are.

Q. How many risers have you in your building?

A. Five.

Q. How often are your eyes tested for soundness and accuracy?

A. I had them tested two years ago.

Q. Not since?

A. Not since, no, sir.

Q. Is that for color?

A. Just for general conditions.

Q. By whom, some private optician or oculist?

A. No, I went to an infirmary in Brooklyn.

Q. Were your eyes treated at that time?

A. Why, they required no treatment.

Q. There are no regular tests by any public au- 38054
thority for your eyesight?

A. No, sir.

Q. And that is true of the other inspectors and examiners?

A. I don't know what they have done.

Q. Haven't you had trouble about the quality of candles during the past two or three years?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial.

The Master: Objection overruled.

Mr. O'Brien: The question is not definite, your Honor, "Haven't you had trouble with candles." 38055

The Master: Objection overruled.

Mr. O'Brien: Exception.

A. We have had some trouble with some candles, and we discarded those and got others.

Q. Do you still use what is called the standard English candle?

A. Yes.

Q. You have been getting it during the war, have you?

A. Yes.

Q. Where made?

38056 Samuel Hirschwitz, Cross.

A. According to the label, in England.

Q. Have you ever noticed the difference that there will be between the observation of some gas by two observers and the extent of the variance between what one man sees and another man sees?

Mr. Chambers: I object to that on the ground that he can't tell what another man sees.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: I object to it as incompetent, irrelevant and immaterial.

38057 The Master: Objection overruled.

Mr. O'Brien: Exception.

A. There have been occasions when my tests, my readings, did not agree with readings of others, but in general they did.

Q. Well, assuming that the Bureau of Standards said the variance was as much as 10 per cent between the observation of the same gas by two observers, would your experience be that the variance might be that?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial, and assuming something that has not been proved.

38058 Mr. O'Brien: I make the same objection.

The Master: Objection sustained.

Q. Would it be your judgment and experience that the variance between the observation of the same gas by two different observers would be as much as 20 per cent?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial.

Mr. O'Brien: I make the same objection. It does not specify the operator.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Mr. Chambers: Exception.

A. It has never been in my experience.

Q. How much do you say?

Mr. Chambers: I object to that as incompetent, irrelevant and immaterial, and ask the witness to guess about somebody else's observations.

Mr. O'Brien: I make the same objection.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: Exception.

A. I think the greatest variance I have ever experienced would be three-quarters of a candle power, which would be less than five per cent. 38060

By the Master:

Q. Where is there apt to be a variance between you and some other observer?

Mr. Chambers: I object to that. How can he tell what another observer did?

Mr. O'Brien: I make the same objection.

The Master: I want the witness to tell me how there can be a difference between the results reached by two observers looking at the thing at the same time and under the same conditions.

Mr. O'Brien: Your Honor, he has not said that. 38061

The Master: I am asking him.

Mr. O'Brien: I object to your taking the cross-examination over from the counsel for the complainant.

The Master: Objection overruled.

Mr. O'Brien: Exception.

Q. What is the human element in this testing where there may be a variance, what is the point of human element that might lead to a variation? A. In actual testing there ought not to be any bodily motion while the testing is going on. The presence

of two persons in one room will create currents of air which will tend to make changes, the candles will flicker, the gas flame may flicker, and since the test is conducted over ten minutes, and twenty readings are taken instead of ten, there is that change that takes place. In my experience at 79th Street, I might stand for ten minutes taking readings, shoving the disc carefully, and there will not be a variation of 2 100 of a candle power.

Q. I have not got the precise formula in my mind, but I get the impression from what Mr. Birdsley
38063 says that in order to determine candle power you have first got to get a sight on the two lights, haven't you, the candles and the gas?

A. You get reflected in the disc.

Q. You have got to judge the point of greatest intensity of illuminating power of the two, have you?

A. Equal intensity.

Q. Now, that of course cannot be measured in any way except by sight, by looking at it?

A. No.

Q. It is a question of judgment, isn't it?

A. It is a question of judgment.

Q. That is the human element where there might
38064 be a variance?

A. Well, if you take it that way.

Q. What I am trying to get at is, I get the impression from what I have heard here that it is not an absolutely exact mathematical proposition that can be measured by a tape, it depends what the man sees, and how he sees it. Is that correct?

Mr. O'Brien: Your Honor, first I object to your Honor's taking over the cross-examination of the witness. Second, I object to your attempting to paraphrase testimony by saying that you have such and such impressions here, impres-

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sions that I do not think are in strict conformity with the testimony already in the record. I submit that this examination should be conducted by the counsel for the complainant and not by the Master.

The Master: Why is it you always object so strenuously when I ask the witness questions —what is the point?

Mr. O'Brien: The point is that all the way through—I suppose you have asked 5,000 questions in this case—

The Master: What is the trouble about it?

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Mr. O'Brien: The point is that there never has been a witness on the stand, put on by the defendants, as far as I know, where you have not taken over the cross-examination of the witness and undertaken to examine him in your own way; and during the last three or four days you have undertaken to carry on argument with the witnesses, apparently asking the witness to agree with your impression.

The Master: What is wrong about it?

Mr. O'Brien: The point is that it is entirely outside of the domain of the Master, it is entirely improper.

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The Master: Why.

Mr. O'Brien: It does not give the defendants a fair trial.

The Master: Why doesn't it?

Mr. O'Brien: Because it doesn't.

The Master: I cannot understand your point.

Mr. O'Brien: You have a certain domain, you are sitting here in a judicial capacity. The extent to which a Master or a Judge may indulge in cross-examination is limited. You have gone clear beyond what I concede to be the domain that a Master should observe in cross-ex-

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running witnesses, and I feel compelled, therefore, as I have done repeatedly in this record, to put it on the record, — that it will be there, that we have undertaken over my protest and over my objection to do this, unless it might be understood that we were assenting to your continuing the cross-examination.

The Master: What I am trying to get at is this, call it what you will: I am trying to find out and satisfy myself as to whether there can be any possible error creep into the candle power reading.

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Mr. O'Brien: You did not go into this minute examination when you had Mr. Woods on the stand and when he was exploiting the candle power. You took his one word about the test, and as to what the candle power was. You did not go into a minute examination as you are doing with this witness. At the point where I objected here you were about to say "My impression are so and so about this case," and you are still going further into the cross-examination.

The Master: But you forget that the fact that Mr. Hirschowitz gives me as to the human element that enters into the testing of gas relate

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just as much to Mr. Woods' testimony as it does to the testimony of the witness.

Mr. O'Brien: No, you are not asking him about the Gas Company's tests.

The Master: What difference does it make? If in the testing for candle power there is a human element entering into the judging of the candle intensity of the lights, will I have as much right to assume that Mr. Woods' tests are apt to be too high or too low, as I have that Mr. Hirschowitz's tests are too high or too low? The trouble with you is that you complain about the

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Master trying to establish a fact to his own satisfaction.

Mr. O'Brien: I am going to object to it, and I am going to object until the case has reached its finale. I say it is entirely improper, and while I say it with all due respect, and with proper decorum, I feel that I have a responsibility, and I am going to perform it in this case, representing one of the defendants.

The Master: I have a greater responsibility than you have, and I am going to perform that, and I am going to get at the truth in whatever way I can.

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Mr. O'Brien: You have no right to take the place of complainant's counsel and conduct the cross-examination, and at this point you are entering into an argument with the witness. You don't know how incisive your questions seem, with that twinkle in your eye, and the particular facial expression that you have, which carries with it the impression here that he must agree with you.

The Master: Is it your complaint that perhaps I cross-examine better than counsel for complainant? Is that what you are complaining about?

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Mr. Clark: Yes.

Mr. O'Brien: I have said what I am complaining about, and what I am going to complain about, and I think it is reversible error in this case.

The Master: It may be a ground for cutting down Judge Ransom's charges, but not for a reversal of the case.

Mr. O'Brien: I am saying here what I am going to say to the District Court. The point is, you started in to argue with the witness. He

38074 has given you his statement, he has gone into it with a minute and careful and studious explanation of the process. You asked him a minute ago as to a certain matter, and he says, "Well, if you take it that way." Then you proceed to say, "Well, my impression is so and so in this case," and you are really in fact carrying on an argument with the witness, it is more than an examination.

The Master: Shall I leave his testimony with an incorrect impression in my mind?

Mr. O'Brien: The witness has not been sitting here like many of the paid employees of the gas consumers' company, he has not been here watching this testimony from day to day, he cannot tell from what you said whether your impressions are gathered from the testimony of the witness primarily, or from the testimony of witnesses who have gone before. The tendency of course is to convince the witness, put forward with such effect as it may have upon the witness coming from the Master. It is entirely improper, and it will be protested against by me to the end of this case.

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The Master: Well, in the light of the reports made by Mr. Hirschewitz, which I assume will develop from his sworn report, I think all of the speech that you have made is perfectly silly, because for months and months I find Mr. Hirschewitz reports a higher candle power—I say for many months, a higher candle power than the City requires; so apparently he is not an adverse witness against the complainant, very much.

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Now, Mr. Hirschewitz, Mr. O'Brien having made the speech, and I am still trying to get the fact clear in my own mind, and in advance saying

to you that I do not want you to agree with anything I say unless you believe it is a correct statement, and getting back to the situation, in these tests that are made of candle power, the accuracy of the test depends to some extent upon the accuracy of the man's sight and his judgment as to the equal intensity of the candle power of the candle and of the gas—is that so or isn't that so?

The Witness: That is so.

The Master: Wherever there is a human element entering into these things there is always a 38078
chance of a mistake?

Mr. O'Brien: The human element is entering into this lawsuit.

The Master: Of course it is.

By Mr. Ransom:

Q. Is there a difference in color in the light between the gas and the candle flame as reflected?

A. There is a slight difference.

Mr. Ransom: That is all.

By the Master:

Q. Let me ask you this, Mr. Hirschewitz: Do you sometimes take the readings in the morning?

A. We are instructed to make tests at all hours of 38079
the day and night.

Q. At different hours of the day and night?

A. Different hours of the day and night.

Q. You said that you usually follow the tests of the Gas Company?

A. We don't start our tests until after nine o'clock.

Q. Are their tests at the station always made before nine o'clock.

A. We don't know that, but we assume that they start testing in the morning, and if we test early—suppose we start a ten-o'clock test, then we will burn

38089 Samuel Hirschewitz, Re-direct

our gas for a longer period than if we started a test at two o'clock in the afternoon.

Q. And what hour of the day do you always blow your gas off before you make your test, up to what hour?

A. We don't blow it off, we burn it off. We always burn it off, no matter when we start testing. If we start testing at nine o'clock at night we burn our gas.

Q. Then your testimony is that you always make sure that you are getting fresh gas?

38085 A. Yes, sir, that is the primary element in making a test.

Q. You always do that?

A. Yes, sir, always. Those are the instructions.

The Master: I will strike out the statement that those are the instructions.

Mr. Chambers: I object to it.

The Master: That will not help me. Suppose the man does not follow the instructions. What I want is what Mr. Hirschewitz did.

Mr. Chambers: I think it should stay in.

The Master: I have stricken it out.

Mr. Chambers: Exception.

38082 RE-DIRECT EXAMINATION BY MR. CLARK:

Q. In your opinion do you insure the getting of fresh gas by the burning off of gas before making tests?

Mr. Ransom: I object to that as incompetent. Let him state how long he burns it, and how many feet he burns.

The Master: I will sustain the objection. You can ask Mr. Hirschewitz just what he does about it.

Mr. Clark: I except to that. He is qualified as a chemist.

The Master: I shall let you give his opinion after he says just what he did.

Q. How long do you burn the gas?

The Master: How many feet do you burn off?

The Witness: There is no telling how many feet. I always try to burn more than five feet off before I make the test.

Q. You always burn four or five feet?

A. Yes.

Q. How long a time does it take?

A. Why, it ought to burn off within half an hour. 38084

Q. In your opinion is that sufficient to insure a fresh supply?

Mr. Ransom: I object to that as incompetent.

The Master: I will take his opinion on that.

Mr. Ransom: Exception.

A. Yes, sir.

Q. Is it as good a method of insuring a fresh supply as the bleeders?

Mr. Ransom: I object to that as incompetent.

The Master: Objection overruled.

A. Why, I think in the case of the 79th Street station it is.

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Q. All of the tests that you make, are they accurate and correct?

Mr. Ransom: I object to that as incompetent.

The Master: I will allow it.

A. I have tried to make them as accurately as I knew how.

Q. Can two persons test at the same time on one of these testing machines?

A. Not and make an accurate test. They can test, but their test will not be accurate.

Q. Is there a place for two eyes on those machines?

A. No, sir.

Q. So that one man would have to test, and then another man would have to test?

A. Yes, sir.

Q. So that two men could not test the same gas?

The Master: At the same second.

The Witness: At the same time.

Q. At the same time?

A. No, sir.

38087 Q. Where you spoke of two people taking a test, you meant one man would take a ten-minute test, and then another man would take a ten-minute test?

The Master: No, he said they alternated in looking at it.

A. The test is taken in ten minutes, and the men instead of making a reading at intervals of a minute, would make them at intervals of thirty seconds.

Q. They would alternate?

A. They would alternate.

Q. Have you ever had any trouble with your eyes?

A. No, sir.

The Master: Do you wear glasses?

38088 The Witness: No, sir.

The Master: Never have?

The Witness: Never did.

Q. Is this method of testing gas accepted among gas engineers and chemists and has it been for a number of years?

Mr. Ransom: I object to that as incompetent.

The Master: Objection sustained.

Mr. Clark: That is all.

By Mr. O'Brien:

Q. Mr. Hirschewitz, the same kind of test is used to determine B. T. U.'s?

A. A different apparatus.

Q. A different apparatus, but the eye is used?

A. Yes, sir.

Q. The human element goes into it just the same to the extent that the eye is used?

The Master: What difference does that make? What do we care about B. T. U. tests

Mr. O'Brien: Well, it makes a lot of difference in this case.

The Master: How?

Mr. O'Brien: You have been trying to compare the systems right through the case. 38090

The Master: No.

Mr. O'Brien: Your Honor will rule on the question, if there is any objection.

The Master: Yes, I rule it out.

Mr. O'Brien: I take an exception.

Q. On the occasion of any of the tests, the results of which you have sworn to in your official capacity at the 79th Street station, have you ever had anybody in the room with you while you have been making your tests?

A. Official tests?

Q. Yes.

A. No, sir. 38091

Q. You have worked sometimes on the night shift?

A. Yes, sir.

Q. As well as the day?

A. Yes, sir.

Q. You have worked in all kinds of weather?

A. Yes, sir.

Q. And has anybody, any of your superiors, the Commissioner of Water, Gas & Electricity, or any of his engineers, ever complained to you that your tests were inaccurate?

38092 Samuel Hirschewitz, Re-direct.

Mr. Ransom: I object to that as immaterial and incompetent.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Has there ever been forwarded to you any statement or claim on the part of the Gas Company that the tests made by you and sworn to were not accurate?

Mr. Ransom: I object to that as immaterial and incompetent.

The Master: Objection sustained.

38093 Mr. O'Brien: Well, will your Honor base an assumption on the failure to complaint about the accuracy of the tests?

The Master: I don't know, but I know I will not permit you to ask the question whether any complaints were forwarded to him, because it has no probative force whether they were or were not.

Mr. O'Brien: We will expect that you will take judicial notice of the City departments. You know about as much as anybody practicing law in New York City about the City departments.

38094 The Master: That is just why I won't take judicial notice of City departments, as to what they do.

Mr. O'Brien: You will not assume then that if protest was made that in his official position it is to be presumed he would know of it?

The Master: No, I don't think there is any basis for any such assumption.

Q. Has any representative of the Gas Company ever complained to you personally of the inaccuracy of your tests?

Mr. Ransom: I object to that as incompetent and immaterial.

The Master: I shall sustain that because of the way you put your question, as to the inaccuracy of his tests. You can ask him whether any gas company official ever complained to him as the result of his test, as to what he reported.

Mr. O'Brien: I am adopting that question.

Mr. Ransom: I am objecting to that question on the ground that there is no formula or procedure for complaint, and that complaints under the law, complaints by the company, would 38096
not be made to him. The mere fact whether some individual said to him that they liked his tests, or didn't like his tests, would be immaterial.

The Master: If Mr. Hirschewitz says that somebody from the Gas Company complained to him that his tests were too low, that he didn't know what he was talking about, it might be of aid to you. I will let him say.

Did anybody from the Gas Company ever say anything to you about your tests?

The Witness: Not officially.

The Master: What do you mean by that? 38097

Mr. Ransom: I object to this.

The Witness: The inspectors of the Gas Company incidentally, in a personal way—

The Master: I guess I won't take any more of it. I can see where this may lead to. I guess we had better stick to the official action by the Gas Company.

Mr. O'Brien: Friendly enemies. If we could only uncover four or five domes here and check up the cash register, I would like to know the thought that is in Judge Ransom's mind just now.

The Master: I can imagine a whole lot of things that an unauthorized inspector, that is, an inspector authorized to read meters, and having no other authority, might have said over a glass of beer, in a corner saloon, and sitting around and smoking a cigar, or walking with Mr. Hirschewitz. There are all kinds of possibilities, and what a man like that might say, or might not say—I think it would be unsafe to take it.

38099 Q. Mr. Hirschewitz, your study in gasology and chemistry was not ended when you graduated from Cooper Institute?

A. No, sir.

The Master: I do not think you need waste any time on that, Mr. O'Brien.

Mr. Ransom: It began then.

The Master: There is nothing brought out in Mr. Hirschewitz's cross-examination which would justify me inferring in the slightest degree that he was not as capable of judging this candle power as any other living man, and the only question I have with relation to it is the possible human element and the possible error. That is

38100 all there is about it; there is no use wasting time about his qualifications.

Q. Well, you spoke about having examined into the methods, or having observed the methods of testing gas in gas companies. Will you state where they were?

The Master: I think that is sufficiently covered; I do not think there is any necessity for any more of it. The point about it all is this, Mr. O'Brien—I do not know, except that I have glanced at some of the figures that are not yet in evidence here, as to just what issue if will

be taken by the Gas Company as to the results reported by Mr. Hirschewitz. As I said before, on many, many days I have noticed he is well above the twenty-two candle power in his reports, taking the tabulation that Major Clark has.

Mr. Chambers: In many he is below, also.

The Master: I can see in many of them he is below; I can likewise see as I glance at it on many that are below they are within the period that the toluol affected it. There is no sense in going further with Mr. Hirschewitz. 38102
If there is any issue between Mr. Hirschewitz and the Gas Company as to any particular time or dates or series of dates, then it will be a question for me to say what possibility of error there was, and that is all. But as to Mr. Hirschewitz's experience or his knowledge, or whether it is done this, that or the other way in some other place, that does not help us any.

Mr. O'Brien: I would like to have him tell you what he has observed in gas companies.

The Master: No, it will not help me any.

Q. Have you observed the methods of testing gas in any of the gas companies of the City of New 38103
York?

Mr. Ransom: I object to that.

The Master: I will not take it.

Mr. O'Brien: Exception.

Q. In any of the gas companies of the Consolidated Gas Company system?

The Master: I won't take it; we have had enough of it.

Mr. O'Brien: Now, we are going right into the question of the statute.

The Master: Yes, I won't let you go into it.

38104 Mr. O'Brien: I want to ask him whether the human element comes in there.

The Master: I do not care. I am going to assume the same human element and possibility of error in the Gas Company's office as there is in his test. I do not know just how I am going to arrive at a conclusion. I do not know just what the explanation is, or what I will conclude, but the fact is that the Gas Company's experts testified that they test candle power—my recollection is that they test it very much as these witnesses have tested it, and it has the human

38105 element in it.

This witness may or may not be right; the Gas Company's witnesses may or may not be right. The fact remains that this witness, using his best judgment, reaching the most accurate result that he was able to reach, reports certain things under oath that I am going to take.

Mr. Ransom: With such apparatus as they have.

The Master: With the apparatus that they used. It does not help us in this case one way or the other. This witness's testimony will be taken as the testimony of a witness—

38106 Mr. O'Brien: Your Honor, we are going to attack the reliability of the tests made by the company at their works.

The Master: All right.

Mr. Chambers: The trouble is that the Master is not the sole Judge of the facts here, and the District Court might want to—

The Master: Pretty nearly.

Mr. Chambers: No, the order distinctly says not.

The Master: I won't take it anyhow.

Mr. O'Brien: I will put that question so that we will have it squarely on the record.

Q. Were these observations made in either the Standard Gas Company, the New Amsterdam Gas Company, the Central Union Gas Company, the Northern Union Gas Company, the New York & Queens Gas Company, the Mutual Gas Company, or the Astoria Light, Heat & Power Company?

The Master: Objection sustained.

Mr. O'Brien: Exception.

The Master: Isn't there a penalty, Mr. O'Brien, of a thousand dollars a day for failing 38108
to give the required candle power, or something like that?

Mr. O'Brien: There is a penalty prescribed in the charter; I do not know the amount.

The Master: Has the City ever instituted an action to recover any one of those penalties?

Mr. O'Brien: I could not say.

Mr. Goetz: It is a thousand dollars for each offense nowadays.

Mr. Chambers: Yes, for each offense.

Mr. O'Brien: Mr. Goetz, would you like to be sued?

Mr. Goetz: Would I like to be used? 38109

Mr. O'Brien: Yes.

Mr. Goetz: Yes, the best thing I would like is to be sued on these violations, and I would undertake to defend the case at the minimum cost and guarantee the results.

Q. And is there a very marked difference in the result, in the accuracy of the test, if two people are in the room at the time, one person besides the tester?

Mr. Ransom: Objected to.

The Master: We have had that; objection

sustained. Mr. Hirschewitz has told us all about it.

Q. You have made the tests at 79th Street also, of the New Amsterdam—the New Amsterdam Company?

Mr. Ransom: Objected to as immaterial.

A. Yes, sir.

Q. What other companies?

Mr. Ransom: Objected to.

A. Standard Gas Light.

The Master: That is, the risers that are

38111 marked, or that you understand to be identified, of that company?

The Witness: The risers that are marked.

Q. Who marked them; who put the labels on these pipes?

A. Representatives from the Consolidated Gas Company.

Q. Do they come in and go out of your testing station at all?

A. Do they come into it?

Q. Yes.

A. Well, they came in on permission.

Q. When they put those labels on?

38112 A. Yes, sir.

By the Master:

Q. Did you see them put them on?

A. I was present.

Q. What are there—five risers?

A. Five risers.

Q. Three of them are marked Consolidated Branches?

A. Three of them are marked "Consolidated."

Q. One New Amsterdam?

A. One New Amsterdam.

Q. And one Standard?

A. One Standard.

Q. And you test all of these?

A. Yes, sir.

By Mr. O'Brien:

Q. You have kept a record of the tests made of them?

A. Yes, sir.

The Master: He made sworn reports every day.

Q. And you have made sworn reports as to all of them?

The Master: I have brought all of that out. I have acted as counsel for the defendants in 38114
bringing that out and making good your sworn reports, and making a basis for you; also balancing up a little of my cross-examination.

Mr. Clark: It is good there is one lawyer in the case.

Mr. O'Brien: We have not them all here, your Honor, and we will offer them all.

Q. Do you know who else has been a tester at your station?

The Master: Objection sustained. We will find that out later on. Go on, Judge Ransom.

Mr. O'Brien: This is in the event that the other man does not get here in time. 38115

Cross-examination by Mr. Ransom:

Q. Mr. Hirschewitz, what is the size of these services?

A. The service—the riser I judge to be an inch and a half, an inch and a quarter to an inch and a half.

Q. Does the riser come directly from the main or from a service into the house?

A. A riser comes from the service into the house.

Q. What is the size of the service?

A. Well, the service I cannot tell; I never have inspected the service.

By the Master:

Q. In other words, as I understand it, there is a main in the street; is that right?

A. That is correct.

Q. There is a service pipe from the main into the house?

A. Correct.

Q. And then there is a riser or pipe from that service pipe up?

A. Exactly.

Q. How many stories?

38117 A. To the third story.

Q. What is below you in that building?

A. A dentist.

Q. What is on the second story?

A. A dentist on the second story, then the store.

Q. Some offices on the second and third?

A. Yes. These are services that no gas is taken off before they reach our story.

Q. Yes, but the riser runs from underground, I suppose, under the cellar?

A. Yes.

Q. Up to the first and second stories and into a room on the third floor?

38118 A. Yes, sir.

By Mr. Ransom:

Q. You have no idea of the size of the service?

A. Not from the main to the riser; no, sir.

Q. Or the length of the service?

A. Why, I should judge the length of the service to be—this is a fifty-foot sidewalk there, plus a ten-foot house, ten foot hallway. That would be sixty feet.

Q. What about the length of the riser?

The Master: That indicates itself, about 35 feet, three stories.

The Witness: About that.

Q. How does the riser come up to this third floor, in the walls or through the rooms below?

A. Attached to the outside of the walls in the hallway, visible from the hallway, exposed.

Q. Did you keep any record of the temperature of this hall?

A. No, sir.

Q. During the winter?

A. No, sir.

Q. How is the hall heated if at all, do you know?

A. Steam heat.

Q. Do you know whether the risers are all attached 38120
to the same mains or different mains?

A. I have no information.

Q. What is the size of the meters?

A. A ten-light meter.

Q. A what?

A. A ten-light meter.

The Master: The one that you use?

The Witness: There are five meters attached to the main.

Q. What kind of a burner do you use?

A. A Bray burner, slit union.

Q. What size?

A. No. 6. 38121

Q. How often is that changed?

A. Changed when the flame begins to deteriorate.

Q. That is, when you think that the flame has begun to deteriorate you change the burner?

A. Put a new burner on.

Mr. Ransom: That is all.

RE-DIRECT EXAMINATION BY MR. CLARK:

Q. Mr. Hirschewitz, does the temperature of the gas before it gets to the photometer make any difference with the service?

38122 William T. Koster, Direct.

A. Why, it would make this difference, that with a stream of warm gas going through a cold temperature the candle power would be likely to deteriorate.

Q. That would mean the temperature in the hall of this building, if it fell a few degrees, would affect the—

A. A few degrees would not matter.

Q. A great many degrees, say twenty degrees, would that affect the candle power of the gas?

A. I think it would.

Q. Are the conditions in the testing station dif-
38123 ferent from what you would ordinarily find in a house in New York City that was using gas?

Mr. Ransom: Objected to as immaterial.

The Master: I will sustain that. That draws a conclusion that is hard to follow.

Mr. Clark: That is what the law is trying to get at, if your Honor please.

The Master: I know that, but it is a conclusion of the witness which it is hard to check.

Mr. Clark: I have no other questions.

(Witness excused.)

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38124

WILLIAM T. KOSTER, called as a witness in behalf of the defendants, being duly sworn, testified as follows:

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Koster, where are you employed?

A. Where am I working?

Q. Yes.

A. I am stationed at the 148th Street station and the Morris Park station, up in the Bronx.

Q. Are you an employee of the Bureau of Gas and Water Department?

A. The Department of Water Supply, Gas and Electricity.

Q. What is your title?

A. Gas inspector.

Q. How long have you been such inspector?

A. Since 1906, January 1st.

Q. Ever since that time?

A. Yes, sir.

Q. Where have you tested gas in that time?

A. Well, I have tested it at various stations in 38126
that time, at the so-called Sixth Avenue station, Brooklyn, at 79th Street, at 148th Street, and the Morris Park station.

Q. Where did you test in 1916?

A. In 1916?

Q. Yes.

A. At 148th Street.

The Master: I am going to hold you to the period beginning January 1, 1918.

Mr. Clark: 1918?

The Master: Yes. There is no necessity for going any farther back than that.

Mr. Chambers: That is only the war period. 38127

The Master: All right, January 1, 1917.

Mr. Chambers: Why don't you say January 1, 1916?

The Master: Why, there was not any toluol operation in 1917.

Mr. Clark: It would be all the worse if they fell down when there was not any toluol operation.

The Master: That is why I am giving you a year, to 1917. 1917 is as far as I will go.

Mr. O'Brien: It is a question of repeated violations, your Honor.

The Master: 1917 is as far as I am going to go now—January 1, 1917.

Mr. Clark: I except to your Honor's ruling.

Mr. O'Brien: I join in that exception.

Q. Where did you test in 1916?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. 1917?

A. 148th Street and Morris Park stations.

38129 Q. 1918?

A. The same places.

Q. You made no tests at 79th Street or the Bowery stations in those years?

A. No, not within the last—

The Master: 1917, 1918 or 1919?

The Witness: No, sir.

Q. Not on holidays, either?

A. No.

Mr. Ransom: Or 1920?

The Witness: Beg pardon?

Mr. Ransom: Or 1920?

The Witness: 1920? No, sir.

38130 Q. What education have you had?

Mr. Ransom: Objected to as immaterial.

The Master: Is this witness to testify to anything except 97th Street and the Bowery?

Mr. Clark: Well, he evidently cannot testify to them.

The Master: No, but is his testimony called for on the Bronx testing station?

Q. Do you test Consolidated gas in the Bronx?

A. That is the Central Union.

Q. The Central Union gas?

A. The Bronx gas I understand is an independent company.

Q. No, I mean you test gas of the Central Union Gas Company?

A. The Central Union Gas I tested.

Mr. Clark: I think we will have to put that in.

The Master: Well, go ahead.

Q. What has been your education?

Mr. Ransom: Objected to as immaterial. It clearly appears that the witness has not tested any gas within the purview of this case.

The Master: Is not the Central Union Gas mixed with your gas?

Mr. Clark: They mix it when they please and 38132
don't when they please.

Mr. Ransom: But that is not within the purview of this statute. This company cannot by any stretch of the imagination be claimed to have been guilty of any violation of this statute because of what may appear on tests of Central Union Gas in the Bronx.

Mr. Clark: It is only mixed when it is to their benefit. When there is a crime committed it is not mixed.

Mr. Ransom: As a matter of fact the Consolidated does not either buy or sell gas with the Central Union.

38133

The Master: There is no exchange of gas in the record?

Mr. Ransom: There is no buying or selling of gas to the Central Union.

Mr. O'Brien: They are on the same mains, your Honor.

Mr. Chambers: Why, certainly; the witnesses have testified to it.

Mr. O'Brien: There were four or five days or a week here when blueprints were put in to show the connections between the Central Union on that 48-inch main.

Mr. Clark: How about the Kingsbridge holder?

Mr. Chambers: The gas is commingled by their own testimony.

The Master: I think I will take it.

Mr. Ransom: Exception.

The Master: What were your qualifications?

Mr. Ransom: If we have to try out every testing station in town merely because it is outside of the Consolidated territory—

A. I took a course in chemistry at Columbia University.

38135 By the Master:

Q. How long?

A. How long?

Q. Yes.

A. Well, I am a graduate in pharmacy and I took the chemistry in conjunction with learning pharmacy.

Q. Did you graduate as a student of chemistry?

A. No, sir.

Q. Or as a pharmaceutical student?

A. As a pharmacist.

Q. You only took so much of the chemistry as was incidental to your pharmaceutical studies?

A. Yes, sir.

38136 Mr. O'Brien: He passed a civil service examination, that is what he did.

Mr. Ransom: He may be the doctor that Mr. Chambers was looking for.

The Master: Proceed, Major Clark.

By Mr. Clark:

Q. Have you continued your studies of the chemistry of gas?

A. Yes, sir.

Q. Ever since that time?

A. Yes.

Q. What method do you use to test the gas at the Bronx station?

A. I use a method similar to the one described by Mr. Birdsley.

The Master: Do you mean similar or the same?

The Witness: The same.

Q. Exactly the same?

A. Exactly the same.

Q. Have you seen gas tested at the Central Union plant?

A. No, I have not.

Q. At any plant of a Gas Company in New York?

A. No, sir.

Q. You never have seen it tested outside of your 38138
own station?

A. Well, I have seen it tested down at our main station.

Q. No, I mean outside of this station.

By the Master:

Q. Where did you learn to test gas and whom did you learn it from?

A. I passed the examination, I studied it up. At that time the office or position was a newly created position; it did not exist before that.

Q. Where did you study before that?

A. My knowledge of chemistry was sufficient to pass the examination.

38139

By Mr. Clark:

Q. Were you instructed in the inspecting of gas by your superiors?

A. Yes, sir, in the beginning.

Q. By whom, by Mr. Birdsley?

A. No, Dr. Love, who was our chief at that time.

By the Master:

Q. What year did you go into the service—1906?

A. Beg pardon?

Q. What year did you go into the service—1906?

A. 1906.

Q. January, 1906?

A. January 1st.

Q. That was right after the statute took effect?

A. Yes, sir.

By Mr. Clark:

Q. And you have tested gas daily since 1906 up to the present time?

A. Yes, sir.

Q. Have you ever tested gas with another man?

A. Yes, I think I have, years ago. We would make a test together, you know, and read alternately.

38141 Q. What variations did you find?

A. There was not much of a difference, as far as I recall.

Q. How much?

The Master: There was some difference?

The Witness: There was a little difference.

Q. Was there always a difference?

A. Beg pardon?

Q. Was there always some difference?

A. Always? Well, I did not make the tests more than once or twice.

Q. No, I mean whenever you made them. Oh, only once or twice you made them?

38142 A. Yes.

Mr. Chambers. All the tests you have made for candle power, have they been accurate and correct?

Mr. Ransom: Objected to as incompetent and improper.

The Master: Objection sustained.

Mr. Ransom: A reflection on Major Clark to ask it.

Mr. Chambers: Exception.

Q. Mr. Koster, I show you sheets, certain sheets, and ask you what they are (handing witness)?

Mr. Ransom: Objected to as immaterial.

The Master: Overruled.

Mr. Ransom: Exception.

A. These are reports made out by me.

The Master: Let me see one.

The Witness: And sworn to, during 1918 (handing Master).

Q. Those are the sworn reports which you make daily or which you did make daily during the days of the year 1918?

A. Yes, sir, they are.

Q. Are they correct? 38144

A. To the best of my knowledge.

Q. You swore to them at the time you made the tests?

A. Yes, sir.

Q. And they accurately report the results of the tests made?

A. Yes, sir.

Mr. Chambers: You have not offered them yet.

Mr. Clark: I offer those in evidence.

The Master: They are public documents.

Mr. Ransom: I object to these on the ground they are incompetent, irrelevant, immaterial; they do not relate to any issue in this case. In 38145
the first place there is no oath that they are correct.

The Master: Yes, there is.

Mr. Ransom: The oath only undertakes to say that the witness was employed as an inspector to inspect and test illuminating gas, and the following are the results of his tests, made on such and such a date, and giving the year.

The Master: That is all the statute requires, I think.

38146 William T. Koster, Direct.

Mr. Ransom: On the further ground that under the proof in this case the tests do not relate to Consolidated Gas Company gas, they relate on their face only to Central Union Gas Company gas. The Central Union Gas Company is a company which manufactures itself and distributes gas in a territory outside of the territory served by this complainant. The Central Union buys gas, but it does not buy gas from this complainant, does not sell gas to this complainant. The gas of the Central Union or such as it purchases is
38147 brought through transmission mains and does not come from distributing mains of the Consolidated System.

The only possible pertinency of any of this line of proof would be on a claim on the part of the defendants that, as the defendant Commission has alleged, there was a failure on the part of this complainant to comply with the statutory standard during a certain period, and proof on the part of—

The Master: Let me ask you: Are any of the Consolidated's customers in the Bronx?

Mr. Ransom: No, sir, not one.

38148 The Master: None at all?

Mr. Ransom: No, sir. There is this further point I want to make: Supposing that it was proved in this case that the Central Union during the period alleged by the Commission, or during any other period, did not supply gas which tested in the manner prescribed by the statute at a distance of not less than a mile from its distributing holders, that would not be proof.

By the Master:

Q. What I want to get clear on the record is this: Where is this Bronx testing station, Mr. Hirschwitz?

A. 148th Street and Third Avenue.

Q. And that tests gas for what territory, north of the Harlem River?

A. West of the Bronx River, I believe.

Q. What?

A. West of the Bronx River. All territory in the Bronx west of the Bronx River.

Q. All territory—well, north of the Harlem River?

A. North of the Harlem River.

The Master: What I want to know is, is there an agreement of counsel that the Consolidated Gas Company does not deliver any gas to consumers north of the Harlem River? 38150

The Witness: I believe that the Standard Gas Company furnishes gas.

Mr. Ransom: The Consolidated Company, under the proofs of this case, serves no customers in that territory. Such mains as the Consolidated Company once had in that territory under the proofs in this case were rented for the use—

The Master: I want to know if there is any disagreement about that.

Mr. Clark: Mr. Hine said he does not think they sell any under their own name up there.

The Master: Then I will sustain the objection, on the ground that the Bronx testing station has 38151
nothing to do with the Consolidated Gas Company.

Mr. Clark: It is the same gas—all the same gas.

The Master: Not necessarily. I will sustain the objection.

Mr. Clark: It is bound to be mixed up.

The Master: I will sustain the objection.

Mr. Clark: Exception.

The Master: We better confine ourselves to Manhattan Island.

38152

Mr. Chambers: Yes, this gas goes into the Consolidated System.

The Master: I do not care whether it does or does not, I am not going to take any tests of gas made outside the territory supplied by the Consolidated Gas Company, and my understanding of it is that the Consolidated Gas Company, as we speak of that company as distinguished from subsidiary companies supplying gas from other mains and charges made by other Gas Companies, does not supply any gas except on Manhattan Island, and I therefore won't take any tests of

38153 gas at a point outside Manhattan Island.

Mr. Clark: I take an exception. I ask to have these marked for identification.

The Master: No, they are sufficiently identified.

Mr. Clark: Exception.

Mr. O'Brien: Your Honor is going to assume that the Central Union Gas is not here?

The Master: No.

Mr. O'Brien: Not part of the Consolidated? Not on the System?

The Master: No, I am ruling I will not take proof of any tests made off Manhattan Island.

38154 Mr. Clark: I similarly offer the tests for 1915, 1916, 1917, 1918 and 1919.

Mr. O'Brien: On account of the distance from the stations.

The Master: No, because I am not interested in the gas supplied to consumers off Manhattan Island. I do not care what kind of gas there is off Manhattan Island.

Mr. O'Brien: What we are driving at is to find out whether the gas being made by this company and thrown into the common fund of gas that is made around the interlocking system is below the candle power.

38155

The Master: That is not the issue. What is your point, Mr. Chambers?

Mr. Chambers: I want to say that this gas is gas, as I understand it, that is supplied to the consumers on Manhattan Island.

The Master: I do not care whether it is or not, I am not going to take proof of tests off Manhattan Island.

Mr. O'Brien: There is no proof in this case that the Central Union does not contribute to this system.

The Master: I have made my ruling. What is your offer, Major Clark?

38156

Mr. Clark: I offer similar tests for the years 1915, 1916, 1917, 1918 and 1919, made by this witness.

The Master: Of the Central Union?

Mr. Clark: Of the Central Union.

The Master: Made by this witness?

Mr. Clark: Made by this witness.

The Master: At this Bronx station at 148th Street and Third Avenue

Mr. Clark: Yes.

The Master: Objection sustained as to all these reports.

38157

Mr. Clark: Exception. I ask to have them marked for identification.

The Master: No, they are sufficiently identified.

Mr. Clark: Exception.

The Master: That is all for this witness.

(Witness excused.)

The Master: What do you want to call Mr. Hirschewitz again for?

Mr. Clark: I have his tests here.

The Master: You do not need him for that. The certificate of the notary proves that. Just offer them.

Mr. Ransom: Your Honor will allow me an exception to that ruling.

The Master: Yes. If you do not believe me I will give you an authority for it.

Mr. Ransom: I do not think that certificate does.

The Master: It proves those certificates for what they may be worth.

Mr. Ransom: I do not think that form of certificate is broad enough.

The Master: That may be, that is another
38159 question: but that certificate—as broad as they are.

Mr. Ransom: The proper form of the certificate may raise a different question.

Mr. Clark: If that question is raised we ought to have Mr. Hirschewitz testify as to these tests—if they are going to raise the question that the certificate is not proof of them.

The Master: No, they say the certificate in its terms is not broad enough.

Mr. Clark: Then we will have to call him and prove by him that he made a test that was satisfactory.

38160 Mr. Ransom: The certificate in form is not sufficient and the certificate is not proof of the test.

The Master: All right, then. Call your witness.

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SAMUEL HIRSCHEWITZ recalled:

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Hirschewitz, I show you certain papers and ask you what they are (handing witness).

A. The sworn reports of tests made at 79th Street station by me at various times.

Q. Are they all made by you?

A. Why, I would have to go over each one individually to determine. If they are signed by me they are.

Q. Such of those as were signed by you were made by you?

A. Yes, sir.

Q. And made at the time the tests were made?

A. Yes, sir.

Q. Immediately after the tests were made? 38162

A. At the conclusion of the day's work.

Q. And they accurately report the tests made?

A. Yes, sir.

Q. Each one accurately reports the tests made that appear on it?

A. Yes, sir.

Q. And each test was made as you have testified?

A. Yes, sir.

Q. Those tests were accurate to the best of your knowledge and ability?

A. Yes, sir.

Mr. Clark: I offer these in evidence, so far as they are signed by Mr. Hirschewitz—all that are signed by Mr. Hirschewitz of the 79th Street station, for the year 1918. 38163

Q. Who is Mr. Wacker—Robert A. Wacker, Mr. Hirschewitz?

A. Mr. Robert A. Wacker is a cellar inspector.

Q. What?

A. A cellar inspector.

Q. Is he still with the department?

A. Yes, sir.

Q. Did he take your place while you were on vacation?

A. On vacation or absent.

38164 Samuel Hirschewitz, Direct.

Mr. Clark: I offer these in evidence.

The Master: That is, those signed by the witness?

Mr. Clark: Signed by Mr. Hirschewitz.

The Master: How many more witnesses will you have, Mr. Chambers?

Mr. Chambers: There is Mr. Mahlbie and Senator Boylan are two, and one more, I don't know who it will be yet.

The Master: Long or short?

Mr. Chambers: Not very long.

38165 The Master: How many will you have, Mr. O'Brien—how many more witnesses will you have?

Mr. O'Brien: Oh, I think I will have three or four.

The Master: Of any length at all?

Mr. O'Brien: Yes, I think they will take up a little time.

The Master: All right, then, we will sit tomorrow night.

Mr. O'Brien: Do you mean we will sit tomorrow night as well as from 9:30 to 6:00?

The Master: Yes.

38166 Mr. O'Brien: Well, over my protest.

The Master: Yes.

Mr. Chambers: My protest, too.

The Master: Likewise the protest of the Bar Association, too, I suppose.

Mr. O'Brien: I want to say to your Honor, I called it to your attention before, you know the exacting conditions of the weather—I have called your attention to the fact that there are five members of my family sick and that I have not been able to be at dinner but once a week practically, or supper, and that I have had to spend nights and Sundays on this case.

38167

The Master: Yes, and the quicker we get through with it the quicker you will be able to spend more time with your family. Let us get through with it tomorrow night.

Mr. O'Brien: I hope your Honor won't break in on my statement. The answer that you give, that you are up nights too, does not answer my statement. I say it is unfair. I make my protest on the record at the way you have driven the defendants since they began their case. It was not done when the complainant was putting in his case.

38168

Mr. Ransom: We tried to have it done.

Mr. O'Brien: They have had ample time to go over their case with their army of employees and attendants and officers, and we have been going ahead under the exactions of your Honor practically from 9:30 until 6 every day, except during the recess time. I submit that it does not give us time to prepare the case properly, it does not give us time to conserve the interests of our clients, and it is a severe burden to place upon any attorneys to say that they have got to go on here daily from 9:30 to 6 o'clock with one hour for lunch.

38169

Mr. Chambers: I want to enter my vigorous protest against it, because I find with the long and hard hours we have been compelled to stay in court we cannot do justice to the case, nor to our clients, nor to anybody. It seems to me it is practically denying us the right to be heard in this court of justice, and I take an exception.

The Master: Now, put your objections as to these, Mr. Ransom:

Mr. Ransom: Well, I object on the ground that these documents are incompetent, immaterial and irrelevant, they do not relate to any issue on which

38170 issue has been tendered by the defendants in this case. The documents offered are not fully authenticated to entitle them to be received in evidence. The form of affidavit is insufficient to come within the rule of law to which your Honor has directed attention, and that rule is not applicable to documents of this sort offered in evidence as against this complainant, the test being made pursuant to a contract between the City and the company, or pursuant to a statute governing the price and quality of gas furnished to the City, and neither that statute nor contract being in issue

38171 here.

The Master: Why spread an objection of that kind on the record when I called your attention to Chapter 735, which places the duty upon the City to test gas not alone furnished to it but to consumers within the city? What is the use spreading an objection in the face of a statute?

Mr. Ransom: On the further ground that the documents on their face contain purported registrations or tests in the matter of pressure on service mains, maximum and minimum and inches, as to which no proper foundation has been laid and which do not relate to any issue here. The qualifications of the witness to make such tests, or the

38172 manner in which they are made, not having been proved, or such proof as has been received indicating the witness's lack of knowledge of the pressures on service mains.

The Master: I understand these reports are offered as to candle power?

Mr. Clark: That is all.

Mr. O'Brien: At this time, your Honor.

The Master: I shall receive the reports to the extent that they show the oath of the inspector and his report as to the Consolidated candle power on the days referred to.

38173

Mr. Clark: That is not restricted to the items marked "Consolidated"?

The Master: Yes.

Mr. Clark: Do you mean we cannot take the New Amsterdam?

The Master: No, I am not going to take the New Amsterdam.

Mr. Clark: I must except to your Honor's ruling in that regard. It is perfectly plain in the territory that is served by all these companies you cannot get the gas apart.

The Master: You have picked them apart on your statements here; that is why I am excluding 38174
it.

Mr. Clark: What?

The Master: You have picked them apart, this inspector has picked them apart. He has reported as to Consolidated branches 3, 4 and 6 in each one of these, and the reports—

Mr. Clark: The proof is still in this case that the gas is in the mains, and it does not make any difference what they label the mains, the gas is the same.

The Master: I am going to limit it to the Consolidated branches.

Mr. O'Brien: Your Honor, you brought this 38175
matter up here yourself during the afternoon session and while this witness was on the stand.

The Master: Yes, I know that.

Mr. O'Brien: If you are going to make a holding that the gas that goes into the transfer system is anybody's gas, as per testimony of the witness Woods, the complainant's witness—

The Master: I think I will reverse myself if you will insist on it.

Mr. O'Brien: I think we better—

38176

The Master: I was trying to protect you defendants, but you won't let me. I will take this as to all.

Mr. O'Brien: It is hard to tell what is in your mind, but if you hold that, you might hold the proof was not adequate because it might not have been the particular gas made by the Consolidated itself.

The Master: All right. I am going to take these reports as showing the tests made at the Consolidated stations as they appear on these reports, and none of the other columns, because they

38177

are not offered for that: except that I will take the hour of the tests, and I call your attention to the fact that if I am right in my understanding and it is the fact that it is the same test in all the mains, it is perfectly ridiculous to find an inspector testing five branches off the same main 21-20, 21-17, 21-20, 21-24 and 21-28.

Mr. Clark: Why so?

The Master: If it is the same gas it has got to test the same. If it is the same gas it has got to test the same.

Mr. Clark: But you cannot tell what gas it is. We do not say it comes from exactly the same

38178

machines.

The Master: The reports of the inspector Hirschewitz.

Mr. O'Brien: Your Honor, it will be up to the complainant, then, to solve that riddle for your Honor. The fact of the matter is that you are substituting your judgment now for an engineer's judgment.

Mr. Ransom: I have not finished my grounds of objection—I had not finished them when I was interrupted.

The Master: Well, proceed.

38179

Mr. Ransom: I wanted to say there was no proof in this case that these tests are made in the place and in the manner and in compliance with the only requirement which is binding upon this company in this case, namely, the requirement contained in the second section, Chapter 125 of the Laws of 1906.

The Master: What is that?

Mr. Ransom: That "the illuminating gas furnished by any such corporation, association, copartnership or corporation shall have an illuminating power of not less twenty-two sperm candles of six to a pound, burning at the rate of one 38180
hundred and twenty grains of spermaceti per hour tested at a distance of not less than one mile from the distributing holder by a burner consuming five cubic feet of gas per hour."

The Master: In what respect is this proof defective?

Mr. Ransom: It does not show and they have no proof of candles six to a pound; there is no proof as to the rate of burning of spermaceti in compliance with the statute; there is no proof of an adequate number of tests. There is no proof of tests at a distance not less than a mile from the distributing holder of the Consolidated Gas 38181
Company.

The Master: Did I understand you to say, Mr. Hirschewitz, that there was a Consolidated testing station in the same building?

The Witness: Yes, sir.

The Master: I will overrule the objection.

Mr. Ransom: Exception.

The Master: The reports of the witness Hirschewitz, contained in this bundle of reports beginning January, 1918, and ending December 31st, 1918, will be received in evidence on the one exhibit number.

38182 Samuel Hirschewitz, Direct.

Mr. Ransom: I suppose the copies will be furnished to us?

Mr. Clark: I will furnish you a list of them.

Mr. Ransom: Copies?

Mr. Clark: Copies? I doubt that very much.

Mr. Ransom: Have them photostated.

Mr. Clark: I doubt that.

The Master: There is no use asking for that.

Mr. Ransom: Why not? We have had to do thousands of dollars' worth of work for them.

The Master: Some arrangement must be made
38183 to give counsel for the complainant access to these reports in order to check them.

Mr. Chambers: Maybe they have copies already; who knows?

Mr. Ransom: Certainly we have not.

Marked as one exhibit Defendants' Exhibit AA-430.

Q. Mr. Hirschewitz, I show you another set of papers and ask you what they are (handing witness)?

A. These are results of tests made at the 60th Street photometer station on various days.

The Master: What dates are included there?

The Witness: From January 2nd, 1919, to De-
38184 cember 31st, 1919.

Q. Were those reports made in the same manner and sworn to as you have testified in regard to the 1918?

A. Yes, sir.

Q. But all those that are signed by you were made on the day that the tests were made?

A. Yes, sir.

Q. And sworn to, and they are accurate representations of the tests made?

A. Yes, sir.

Q. And the tests made were to the best of your knowledge and belief accurate tests of the gas at that time?

A. Yes, sir.

The Master: Do you offer these?

Mr. Clark: I offer these in evidence so far as they are signed by Mr. Hirschewitz.

Mr. Ransom: Same objection.

The Master: The same objection will be noted as to the 1918 reports.

Mr. Ransom: And the same portions received?

The Master: And the same portions received 38186
as are received as to 1918, the column "Candle Illuminating Power" and "Time of Test."

Mr. O'Brien: The first column, too?

The Master: Well, the name of the company, of course. From January, 1919, to December 31st, 1919, the reports of the witness Hirschewitz are received as one exhibit.

Mr. O'Brien: That is the Consolidated, New Amsterdam and Standard Gas Light Company?

The Master: Yes.

Marked as one exhibit Defendants' Exhibit AA-431.

The Master: I cannot see how you get different 38187
tests at the same station.

Mr. Chambers: It is intermingled gas.

Mr. Clark: But it does not go out the same. You get different proportions from different mains.

Mr. O'Brien: There is a greater consumption, your Honor, and it may be in the mains longer.

Mr. Clark: I suppose the gas labeled "Mutual" comes more from the Mutual plant. That is all I have for Mr. Hirschewitz.

Mr. O'Brien: You know Mr. Straus' signature?

The Witness: I think I can identify it.

Mr. Clark: I will call Mr. Wacker.

Mr. O'Brien (to witness): You wait, will you?

The Master: No, he need not wait; I will not take him tonight.

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Robert A. Wacker, called as a witness in behalf of the defendants, being duly sworn, testified as fol-
38189 lows:

Direct-examination by Mr. Clark:

Q. Mr. Wacker, what is your position?

A. Gas inspector.

Q. In the Department of Water, Gas and Electricity.

A. The department of water supply, gas and electricity.

Q. How long have you held that position?

A. Twelve years; about twelve years.

Q. About twelve years?

A. Yes, sir.

38190 Q. Did you get the position as the result of civil service examination?

A. Yes.

Q. What education have you had?

A. Well, I took a special course in Cooper Union, a five-year night course, then I specialized at Polytechnic Institute in coal tar dyes and organic chemistry. I took various special courses outside.

Q. And for the past twelve years you have made daily tests of gas? A. Yes, sir.

Q. Where?

A. For the past twelve years, why, I guess I have made them in all stations.

By the Master:

Q. For the past three years—1917, 1918, 1919 and 1920?

A. Well, 1918 and 1919 I know I was in Flushing. I am not sure where I was in 1917.

Q. In 1917?

A. No.

By Mr. Clark:

Q. Where were you before 1917?

A. Beg pardon?

Q. Where were you before 1917; where did you make tests? 38192

A. I was sent to different stations. I could not recall just definitely.

Q. Did you make some tests at 79th Street in 1918?

A. No, I don't believe I did. That must have been during vacation, I suppose, if it is there.

Q. Yes, that is what I mean.

A. Vacation period? Yes, I may have done it then.

Mr. Ransom: I will concede that he will testify that he made the tests, which he signed in 1918, referred to.

The Master: You had better find out what kind of a machine he used when he was there.

Q. What kind of a machine did you use at 79th Street? 38193

A. Why, the same as Mr. Hirschewitz used.

Q. The same machine?

A. Yes.

Q. You used it in the same way?

A. Yes.

By the Master:

Q. Did you hear Mr. Hirschewitz testify as to how he used this?

A. Why, I was here when he testified, yes.

Q. Were you?

A. Yes.

Q. When he told how he used it?

A. Why, he did not go into detail, if I remember right.

Mr. O'Brien: He came in afterwards, I think.

The Witness: I came in late.

Q. That is what I thought. I think you better tell us how you test gas.

A. Well, I used standard candles of six to the pound. We cut them in the center and trim off the wicks until they are burning properly and aligning them at the plumb line, that is exactly six feet from
3819 the gas we are testing—they are aligned in a candle balance and the candles are burning properly—why, after burning up the candles to a point where they are just about ready to fall, I have my meter all set and of course the meter has been regulated previously to burn at five feet an hour. As soon as the candles begin to fall at the zero point, as indicated on the photometer, I start off the meter.

The room, of course, is darkened, and then I take readings, ten readings a minute apart, a ten-minute test, and then shortly after the ninth minute I watch the balance and when it again falls after throwing on forty grain weights—I believe I omitted to mention
3819 that—at the end of the ninth minute that ought to begin to fall again. Then I shut off the meter, make note of the date and the consumption of sperm, the rate of gas flow and the readings, average them up and calculate, and from the calculation I get my candle power.

Q. Do you observe the intensity of the lights?

A. Oh, surely, in a sight box.

Q. What do you do about that?

A. The lights shine upon a disc in what is known as a sight box that slides along a bar on which are graduated the candle powers, the candle power gradu-

ations, and each observation is made note of, each minute observation, and the calculation involved multiplying the calculation by 2 because you use two candles. I believe I have answered.

By Mr. Clark:

Q. Mr. Wacker, I show you certain papers and ask you what they are (handing witness)?

A. Well, these are reports of tests made by me. I believe they are all made by me. All that are signed by me are my reports.

Q. Are those tests which are recorded on those sheets made in the manner which you have described? 38108

A. Yes.

Q. Did you sign and swear to those reports on the day on which the tests were made?

A. Yes. I did not always swear to them; there might have been one or two here that I swore to the next day, but they were sworn to after the tests were made.

Q. Do they accurately report the result of the tests?

A. Yes.

Q. And the tests to the best of your knowledge and ability accurately record the candle power of the gas?

A. Yes.

Mr. Clark: I offer them in evidence. 38109

The Master: That is from October 1st to October 28, 1918, the Wacker reports.

Mr. Ransom: Same objections.

The Master: As to the Hirschewitz reports?

Mr. Ransom: As to the Hirschewitz reports.

The Master: Same ruling.

Mr. Chambers: Why not give those the same number, AA-430? They are part of AA-430.

The Master: Yes, I will do that. They will be included as part of AA-430, being the 1918 reports of the 79th Street station; so that that ex-

hibit now includes the Hirschewitz reports and the Wacker reports for that year.

Mr. Chambers: That includes all of them but one.

The Master: Anything else from Mr. Wacker?

Mr. Clark: That is all.

CROSS-EXAMINATION BY MR. RANSOM:

Q. Mr. Wacker, do you cut the candles in two?

A. Yes.

Q. Do you trim the candles yourself?

A. Yes.

38201 Q. How often do you use fresh candles?

A. Whenever I need new ones.

Q. In your judgment—according to your judgment?

Q. Well, if the old candles do not come up to the required—what is required of them, why, I throw them out and put in new ones.

Q. At the beginning of each test do the candles weigh six to the pound?

A. No, because the ends of them have to be trimmed off.

Q. What do you trim them with?

A. Well, there is a tip to all candles which has to

38202 be cut off in order to fit into the holder.

Q. Did you completely describe what you do when you test the gas?

A. I believe I did.

Q. How many grains of spermaceti do you burn during your tests?

A. Why, that is according to the candles. The candles do not burn 120 grains exactly; there is a certain amount of correction to be made, according to the make of the candle.

Q. The candles do not burn uniformly?

A. That is right.

Q. They vary according to the make?

A. Why, they vary according to the way they are made, not according to the make.

Q. And you have to make readjustments of that sort?

A. I make corrections.

Q. Yes, corrections?

A. According to the weight of the sperm consumed.

Q. You do not put down in these reports the candle power that you observe?

A. No, I put them on test sheets.

Q. Then you change them or correct them? 38204

A. I calculate the corrections, yes.

Q. Why do you correct them, for barometric pressure?

A. And because the volume of the gas has to be figured from some standard unit. For instance, the gas volume has to be figured from, say, 30 inches barometric pressure and—

Q. Barometric pressure reflects weather conditions?

A. Yes.

Q. And that makes a difference in the candle power?

A. Yes, indirectly.

Q. And temperature, the same way?

A. Yes. 38205

Q. And you correct according to the temperature in the room?

A. Yes, correct according to the temperature of the gas.

Q. What is that?

A. You correct according to the temperature of the gas, not the room.

Q. You do not make any allowance for the temperature of the room?

A. No.

Mr. O'Brien: He did not say that.

The Master: Do not interrupt.

38206 Robert A. Wacker, Cross.

Q. Do you make any allowance for the temperature of the room?

A. No, that is not figured.

The Master: Now, he said it.

Q. You do not record the temperature of the room?

A. No, I do not record the temperature of the room.

Q. Do you make any allowance for variations in temperature from time to time along the transmission lines from the holder to the testing station?

A. No.

Q. But it has been your experience, particularly in
38207 Flatbush, that temperature does very greatly affect candle power?

Mr. O'Brien: Just a minute, that is assuming something that is not in the testimony, your Honor.

Q. The temperature of the room?

A. In Flatbush?

Q. Yes.

A. I have never been down to Flatbush at all.

Mr. O'Brien: The counsel is making an assumption—

Mr. Ransom: Well, Flushing.

Q. It has been your experience that temperature of
38208 the room does make a difference?

A. I believe it does, slightly.

Mr. Ransom: That is all.

Mr. Chambers: Today was the last day that I had to put in tables, and mine were not in. I have some more.

The Master: I will let you put them in tomorrow.

Adjourned to Tuesday, February 17, 1920, at 9:30 o'clock A. M.

Last Complainant's Exhibit No. 467.

Last Defendants' Exhibit AA-431.

CONSOLIDATED GAS COMPANY OF NEW YORK vs. NEWTON, ETC., *et al.* 38209

Before ABRAHAM S. GILBERT, Special Master.

NEW YORK, February 17, 1920.

Met pursuant to adjournment.

Present: MR. RANSOM, MR. VILAS and MR. GOETZ, of Counsel for Complainant.
MR. CHAMBERS, of Counsel for defendant Newton.
MR. HAYWARD, MR. CLARK and MR. NEUMANN, of Counsel for Public Service Commission. 38210
MR. O'BRIEN, of Counsel for defendant Swann.

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GEORGE J. ELSASSER, called as a witness in behalf of the defendants, being duly sworn, testified as follows:

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Elsasser, what is your occupation?
A. Gas inspector.
Q. In the Department of Water Supply, Gas and 38211
Electricity?
A. Yes, sir.
Q. How long have you been in that department?
A. Since April, 1919.
Q. April, 1919?
A. Yes, sir.
Q. What did you do before that?
A. I was with the Public Service Commission.
Q. In what capacity?
A. As a gas inspector.

38212

Q. For how long?

A. One year.

Q. And prior to that?

A. With the Brooklyn Union Gas Company for fourteen years.

Q. For fourteen years?

A. With the Brooklyn Union Gas Company.

Q. What did you do with the Brooklyn Union Gas Company?

A. I had charge of the gas appliances. I was a foreman.

38213

Q. Gas appliances?

A. Yes, sir.

Q. Did you do any gas testing there?

A. No, sir.

Q. How do you test gas for the City?

A. By photometric.

Q. What machine?

A. The standard photometer.

Q. Were you here yesterday when Mr. Birdsley testified?

A. Yes, sir—not when Mr. Birdsley testified, no. I was here later.

Mr. Ransom: When Mr. Hirschewitz testi-

38214

fied.

Q. When Mr. Hirschewitz testified?

A. Yes, sir.

Q. Were your tests made in the same manner that he stated?

A. Yes, sir.

Q. Will you describe the process?

Mr. Ransom: I do not think it is necessary to go over it again. He says it is the same way.

The Master: All right, if you do not think so.

Mr. Chambers: Well, describe the process.

Mr. Ransom: If you want him to describe it, then he can describe it.

Mr. Chambers: You claim that he is not qualified.

The Master: Do not interrupt, Mr. Chambers. Go on with your questions, Major Clark.

Mr. Chambers: Let us try the case right this morning.

The Master: Stop those speeches. You do not want to work nights, do you?

Mr. Chambers: I want to work as long as I 38216
must to protect my clients.

The Master: Let us stop the speeches, then. If you do not want to work any night sessions, just stop these speeches.

Mr. Chambers: Exception.

Q. Did you ever see gas tested in the Brooklyn Union works?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. Did you ever see gas tested anywhere outside of the City testing stations or the Public Service testing stations? 38217

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. Are you acquainted with the art of gas testing: have you made a study of it to any extent?

Mr. Ransom: Objected to as immaterial.

The Master: That is overruled.

Mr. Ransom: Exception.

A. Yes, sir.

Q. Is the method pursued by the City in testing gas the most advanced method, in your judgment?

38218 George J. Elsasser, Direct.

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. I show you certain papers and ask you to describe what they are (handing witness)?

A. These are reports of candle power tests made by me.

Q. At what station?

A. At 79th Street and some I made at Grand Street.

Q. Those are all of 79th Street?

A. Yes, sir, these were made at 79th Street.

38219 Q. Were those made in accordance with the system that was described yesterday by Mr. Hirschewitz?

A. Yes.

Q. Were they sworn to on the same day, or soon after you had made the tests?

A. Within a day or two after, yes.

Q. And do they accurately show the results of the tests made by you?

A. Yes.

Q. Those tests were made accurately and were accurate tests of gas to the best of your knowledge and belief?

Mr. Ransom: Objected to as incompetent.

38220 The Master: Overruled.

Mr. Ransom: Exception.

A. Yes, sir.

Q. Do you know what kind of candles you used in making these tests—making all the tests of the City?

A. Yes, sir.

Q. What were they?

A. Six pounds; six-pound candles.

Q. Six-pound candles?

A. Six to a pound.

Q. Burning at what rate? They are supposed to burn at what rate?

A. They are supposed to consume 120 grains an hour.

Mr. Clark: I offer these in evidence.

The Master: Same objection, I suppose?

Mr. Ransom: Yes.

The Master: Same ruling. They will be received. What year is that?

Mr. Clark: They will be marked the same number as for the 1919.

The Master: They will be included in the 1919 batch of reports for the 79th Street station. 38222

Mr. Chambers: That is Exhibit AA-431.

The Master: They need not be marked. They will be considered as included in Defendants' Exhibit AA-431.

Mr. Ransom: May I just see those a moment, that were just received? May I see those?

The Master: Judge Ransom wants to see those reports that were just offered.

Mr. Chambers: Just a minute now. Don't you see I was doing something?

The Master: If you were doing something you could have indicated that you heard Judge Ransom's request and not have ignored it as you did. 38223

(Mr. Chambers hands papers to Mr. Ransom.)

Mr. Ransom: I will note the same objections that I made on the other ones, and exception to the admission.

The Master: Just show him a batch of his 1919 reports and offer them.

Mr. Clark: He only came in in 1919 and he took them at odd times.

The Master: Just show him a few of them

38224 George J. Elsasser, Direct.

and offer them as if you had picked them all out. It is not important to offer all of them.

Q. Mr. Elsasser, I show you certain sheets and ask you what they are (handing witness)?

A. These are the tests made at Grand Street station.

Q. During the year 1919?

A. Yes, sir.

Q. Were those tests at Grand Street made in the same manner that you have testified as to the tests at 79th Street?

38225 A. Yes, sir.

Mr. Ransom: The same apparatus?

Q. The same apparatus?

Mr. Ransom: The same kind of apparatus?

The Witness: Yes.

Q. Are these that I hand you the same (handing witness)?

A. Yes.

Q. What precautions do you take at Grand Street to assure yourself that you have a fresh supply of gas before taking these tests?

38226 A. The gas is always purged for one hour before we start taking the test.

Q. For one hour?

A. Yes.

By the Master:

Q. Before you start taking the test?

A. Before I start taking the test.

Q. You do not know what other men do?

A. No.

By Mr. Clark:

Q. Is that in your opinion a way that insures a fresh supply of gas?

Mr. Ransom: Objected to as incompetent. Let him state the physical condition so that the Master may—

Mr. Clark: A City gas inspector is an expert.

Mr. Ransom: Not necessarily as to that.

The Master: I guess you better go a little more into detail.

Mr. Ransom: If the answer has been noted I move that it be stricken out.

Mr. Clark: I take an exception.

By the Master:

Q. Let me ask you, Mr. Elsasser, do you find that 38228
the tests run lower in the winter than in the summer months?

A. No, I cannot say that.

Q. I see some of these reports here, one in December, they run considerably lower than in June and July. Did you find that to be a general condition?

A. No, I did not.

Q. Sometimes they run high in winter and sometimes high in summer?

A. No.

Q. What?

A. No, I did not.

Q. You do not understand me. They are apt to 38229
run just as high in winter as they do in summer, or just as low, either way?

A. I found it that way, yes.

Mr. Chambers: What do you mean, the candle power is apt to run as high in the summer as the candle power does in the winter?

The Master: I asked the witness whether there was any connection between the lower candle power in winter—whether it usually ran higher in the winter and lower in the summer. No, he said, it would run the same: it might be

38230 George J. Elsasser, Direct.

high in winter and low in the summer or low in the winter and high in the summer. Is that correct?

The Witness: That is correct.

Mr. Clark: I did not just get your Honor's ruling about whether that would insure the purging of the gas.

The Master: I do not think he is qualified, from what you have brought out from him, to testify to that.

By Mr. Clark:

38231 Q. What has been your education along chemical lines?

A. I had two years at Pratt's Institute and a year and a half in chemistry, in the manufacture of gas, with the International Correspondence Schools.

The Master: What?

The Witness: Two years in Pratt's Institute in general chemistry and a year and a half with the International Correspondence Schools. That is a special course in the manufacture of gas.

Q. Did you pass the civil service examination for this position?

A. I did.

38232 Q. And in the fourteen years you were with the Brooklyn Union Gas Company did you have anything to do with gas?

A. No, with meters and gas appliances, burners, and so forth.

Q. Burners?

A. Yes.

Q. As far as burning gas went, you had experience with burning gas?

A. Only in the testing of different mantles and so forth.

Q. Would you say from your experience that burning gas for an hour would ensure a fresh supply?

Mr. Ransom: Objected to as incompetent.

The Master: I will sustain the objection. I do not think this witness is qualified to testify to that extent.

Mr. Clark: I take an exception.

Mr. Chambers: Exception.

Mr. Clark: That is all.

By the Master:

Q. It makes a good deal of difference whether you have a fresh supply or not, does it? 38234

A. Well, the way the instructions were, that we got, was to be sure we got a fresh supply, that we were getting the gas of that day.

Q. You do not know whether there is any other reason for it except that?

A. No.

By Mr. Clark:

Q. I show you some other papers and ask you what they are, Mr. Elsasser (handing witness)?

A. These are tests made by me at 148th Street.

The Master: And Third Avenue?

The Witness: And Third Avenue.

Mr. Clark: I offer them in evidence. 38235

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Clark: Exception.

Mr. Ransom: You have not offered these Grand Street sheets yet.

Mr. Clark: Haven't I? I offer the Grand Street papers in evidence.

The Master: The same objection as to other reports of the same character?

Mr. Ransom: Well, I make the same objection, and the further objection that with respect

38236 to these tests at Grand Street and the Bowery it affirmatively appears from the undisputed testimony in this case that by reason of acts of the City of New York and the Public Service Commission, or now the Rapid Transit Commission, over which the complainant company has no control, the mains of this company for the transmission of gas in immediate proximity to the City's station at Grand Street and the Bowery have been exposed to the air and to the temperatures in the air by reason of the by-passing and changes of mains incident to rapid transit construction and
38237 other City work.

Mr. Clark: I object to this statement. I do not think there is any such testimony in this case.

Mr. Ransom: So that the tests of gas at Grand Street and the Bowery—the gas tested at Grand Street and the Bowery, by reason of acts of the City and the Public Service Commission, has been subjected to unusual conditions, affecting candle power and making more difficult than otherwise it would be the maintenance of candle power at that point. So that the City and the Public Service Commission have no right to at-
38238 tach importance to what may be shown by their tests at that point.

The Master: I shall overrule the objection on the ground that what has been said by counsel, assuming the record is as stated, is not a ground for objection but is a ground for excusing the result.

Mr. Ransom: That is in addition to all the other grounds.

Mr. Clark: I take exception to the statement on the ground that there is no basis for it in the record.

38239

The Master: And I say I do not recall at this time the testimony on that point. But assuming there is testimony on that point, I have ruled that it is not a ground for rejecting the testimony. Have the Grand Street reports been marked as an exhibit at all?

Mr. Clark: They have been offered and the objection has just been made.

The Master: But there are no other exhibits yet for Grand Street?

Mr. Clark: No, there are not.

The Master: What year is this?

Mr. Clark: 1919.

38240

The Master: These papers will be received and considered as Defendants' Exhibit AA-432, representing the Grand Street reports for 1919.

Mr. Ransom: Or some of them.

The Master: Well, that exhibit number will represent the 1919 reports for Grand Street.

Mr. Ransom: Yes.

The Master: It is not important to mark it.

Mr. Chambers: Certainly, mark it. He will claim that it is not an exhibit in the case.

The Master: What?

Mr. Chambers: They will claim it is not an exhibit in the case later.

38241

The Master: Then I will not mark it.

Mr. Chambers: I know something about the trial of these cases. It will be claimed hereafter that that is not an exhibit.

The Master: It is a public document.

Mr. Chambers: The Master refuses to mark it, does he?

The Master: Yes, to physically mark it.

Mr. Chambers: I ask that it be marked for identification.

The Master: It is in evidence as Defendants' Exhibit AA-432.

38242 George J. Elsasser, Cross.

Mr. Chambers: I ask that it be marked. I take an exception.

Grand Street 1919 reports considered as Defendants' Exhibit AA-432.

Q. These tests at 148th Street that you have identified, were they made in the same manner?

A. Yes, sir.

Q. With the same apparatus?

A. Yes.

Q. And they accurately represent the results of the tests?

38243 A. Yes, sir.

Q. And the tests were accurate to the best of your knowledge and ability?

A. Yes.

Mr. Clark: I offer them.

The Master: What station is that?

Mr. Clark: 148th Street.

The Master: That is rejected.

Mr. Clark: Yes. Exception.

The Master: I have allowed you an exception on that. I am not interested in any gas tests off Manhattan Island.

Mr. Clark: Your witness.

38244 Cross-examination by Mr. Ransom:

Q. What kind of a building is this Grand Street and Bowery testing station located in?

A. Do you mean the construction of it?

Q. What kind of a building is it?

A. A brick building.

Q. On what floor is your station located?

A. On the third floor.

Q. Is it on a corner or in the middle of the block?

A. On the corner.

Q. What corner?

A. The corner of Grand Street and Bowery.

Q. What is on the first floor of the building?

A. A bank.

Q. What is on the second floor of the building?

A. The Consolidated testing station.

Q. Where do the pipes come up, through what, the walls of the building?

A. Through the wall of the building, yes.

By the Master:

Q. They are not exposed?

A. Only in the room, not outside.

Q. I mean not on the walls?

A. No. 38246

By Mr. Ransom:

Q. There are five risers in your testing station?

A. Yes.

Q. What are the dimensions of the risers?

A. Three-quarter inch diameter.

By the Master:

Q. How are they marked?

A. They are marked with tags.

Q. What tags; what does it say on them?

A. It says the street of the plant, 44th Street station, 14th Street station, 21st Street station, New York Mutual and New Amsterdam.

Q. The 14th, 42nd and 21st Street stations are 38247 marked "Consolidated"?

A. No.

Q. Does it just say 14th Street, 21st Street, 42nd Street?

A. Yes, sir, just as I say.

The Master: I see.

By Mr. Ransom:

Q. Do you know the services from which these risers are connected are in the basement of this building?

The Master: Do you know what the service is?

A. The street service you mean?

Q. Yes, these risers are connected with services in the basement?

A. Yes.

Q. That come in from the street?

A. Yes.

Q. Do you know how wide the sidewalk is at that point?

A. Well, I should judge about nine feet.

By the Master:

Q. From the curb to the house?

38249 A. From the curb to the house.

Q. From curb to house line?

A. Yes.

Q. Which sidewalk, the Bowery or Grand Street?

A. Grand Street.

By Mr. Ransom:

Q. Do you know the size of these services?

A. No.

Q. Have you ever seen them?

A. No.

Q. You do not make any notation of temperature in the room?

A. No.

38250 Q. You do not make any readjustment according to the temperature in the room?

A. No.

Q. You do make what you call corrections of temperature according to barometric pressure reflecting the weather?

A. Yes, sir.

Q. And according to the temperature of the gas?

A. Yes.

Q. This is done according to some tables that somebody gave you?

A. Well, yes, it is taken—we use the logarithms.

By the Master:

Q. Use a logarithmic table that is prepared and furnished you?

A. Yes.

Q. You do not make up the table yourself?

A. No.

Q. You did not figure it out on the logarithmic basis?

A. No.

Mr. Ransom: That is all.

(Witness excused.)

Mr. Clark: I will call Mr. Frank for cross- 38252
examination.

The Master: No, finish this line now.

Mr. Clark: Do you want to finish this?

The Master: Yes, finish this up.

Mr. O'Brien: We did not finish with Mr. Birdsley yesterday and he is bringing up some records now.

The Master: Finish all this candle power business now.

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SYDNEY STRAUS, called as a witness on behalf of 38253
the defendants, being duly sworn, testified as follows:

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Straus, where are you employed?

A. I am with my brother in business at present, but I am not now in the Department of Water Supply, Gas and Electricity.

Q. Up to what time were you with the Department of Water Supply, Gas and Electricity?

A. February 1st.

The Master: 1920?

The Witness: 1920.

Q. How long had you been with the department before that?

A. About seven and a half years, or eight years.

Q. In what capacity?

A. Gas inspector.

Q. What education have you had?

A. High school education and college education.

Q. Where?

The Master: What chemistry education have you had and what education have you had with relation to qualifications to test gas?

38255 The Witness: Graduate of the Polytechnic Institute of Brooklyn, Bachelor of Science, in Chemistry.

Q. Did you take any chemistry after you left there?

A. Not after I left there; no, sir.

The Master: What line of business are you in now?

The Witness: I am in the insurance business.

Q. Have you had any trouble with your eyes?

A. Not to speak of.

Q. Have you ever worn glasses?

A. I did wear glasses at different intervals to ease the eyes.

38256 Q. Any trouble with the accuracy of your vision?

Mr. Ransom: Objected to as incompetent.

The Master: I will let him say.

Mr. Ransom: How can he say whether he has or not?

The Master: Just as a man can say what day he was born on.

Mr. Ransom: If a man cannot say whether he sees straight or not—

Mr. Chambers: You asked that question; what is the use being two-sided?

The Master: He can say as the result of visits to eye doctors and getting glasses that he understood it was because of a defect of vision or weak eyes.

A. No.

By the Master:

Q. Has any doctor ever advised you that you had defective vision?

A. No, sir.

Q. Or inaccurate vision?

A. No, sir.

Q. What did you understand you wore glasses for? 38258

A. Why, my eyes were a little watery at times, but it did not amount to anything.

Mr. Clark: Mr. Straus, where did you conduct tests of gas while you were with the department?

The Witness: Why, 122 Bowery.

Q. Is that the corner of Grand Street?

A. Yes, sir.

The Master: Well, we do not care much where else he tested it. He did test it at the Grand Street and Bowery station.

Q. Did you test at 79th Street at all?

A. Yes, on occasions. 38259

Q. During 1918 or 1919, do you know?

A. I do not think during 1918 or 1919; no, sir.

By Mr. Clark:

Q. What method did you use to test gas at the Bowery station, for instance?

A. Well, we used the photometer, 60 inch bar, open, and the method of testing the illuminating power of the gas against the illuminating power of standard candles.

Q. Will you describe in detail the process that you used?

A. Why, first I gave sufficient time for the gas to burn out thoroughly—

Mr. Ransom: I move to strike out that he "gave sufficient time for the gas to burn out thoroughly."

The Master: Yes.

Q. How long did you burn the gas before you took the test?

The Master: Strike out the statement that he gave sufficient time. I will allow the witness to state how much time he did give.

38261 A. Why, no less than an hour.

Q. Was that in your opinion sufficient to secure a fresh supply of gas?

Mr. Ransom: Objected to as incompetent.

The Master: That is sustained. I will let the witness state why he burned it not less than an hour.

Mr. Clark: Exception.

Q. Why did you burn it for not less than an hour?

Mr. Ransom: Objected to as incompetent, the qualifications of the witness not being shown.

The Master: I will let him state that—why he did it.

38262 Mr. Ransom: Exception.

The Master: Why did you burn it for not less than an hour; pursuant to instructions or for some reason of your own?

A. Why, as far as I can remember we figured out once just how long it would take the gas to reach from the riser to the photometer, burning at the rate of 5 cubic feet an hour.

The Master: Who is "we"?

The Witness: I think that was done by Mr. Birdsley and myself at 122 Bowery, but I cannot just remember when we calculated it. I am

pretty sure we found out that by allowing the gas to burn from half an hour to an hour or more would give sufficient time for it to be fresh when it reached the photometer.

Q. That is, you figured that at the end of that time you would be receiving the gas at that time that would be in the mains?

Mr. Ransom: Objected to. That is not what he said. He said it was in the riser.

The Master: I will sustain the objection. You need not repeat what he said, it simply leads to confusion. 38264

Mr. Clark: Exception.

Q. Will you continue to state in detail the process by which you tested the gas?

A. Why, after the gas had been purging for a time, that is an hour or more, I looked over the photometer to see that the water level was all right—

Mr. Ransom: I move to strike out "the water level was all right." Let him state what he saw as to the water level.

Mr. O'Brien: Why, this man is an expert. Does the degree of Bachelor of Science mean anything, or a course in college, a polytechnic institute? Your Honor, I want to call your attention to this, if you have not noticed it already, that when I am examining the witness I will get ten questions in to any counsel's one, by reason of the rapidity with which I speak, so you are not wasting much time on me. 38265

The Master: I will let the witness state that he looked at the water level to see if it was all right, and let you cross-examine if you are not satisfied with it.

Mr. Ransom: Exception.

Q. What did you do; continue to describe the process in detail.

A. Why, then I started to burn my standard candles until they burned at the right rate.

Q. Will you describe the machine and the candles which you used?

A. The machine was a 60-inch open bar Sugg-Lethaby photometer. It was a standard type of machine used.

Q. What did it consist of?

A. It consisted of the gas meter, the dry governor,
38267 wet governor.

Q. Describe the province of each of these things and where they are placed on the machine?

A. Well, as the gas comes from the riser through the pipes it first passes through the dry governor where the pressure is reduced, and it then passes through the meter where the rate is adjusted so that 5 cubic feet, the conditions under which you work, can be obtained.

Q. 5 cubic feet per hour?

A. Per hour. From there it goes through the wet governor where the rate—not the rate, but the fluctuations that take place in the meter are taken care of,
38268 and as the gas reaches a burner it is ready to be tested. In the meanwhile, while the meter has been adjusted to get this rate, the candles are being burned on the other side so that they are burning at the right rate and the test may be conducted.

Q. How is the test conducted; where do you stand when you conduct it and what do you do?

A. The sight box on the photometer is used to take the readings given, by a comparison of the light of the candles and the light of the gas. 10 readings are taken.

Q. Where is the sight box and where do you get the comparative light of the candle and the gas?

A. The sight box is a piece of apparatus consisting of two mirrors to reflect the light onto a disc, which shows certain intensity of light, whereby the comparison of the gas—that is, the comparison with the light of the gas and the light of the candles, may be taken and read directly on the bar, which is standardized for that purpose.

Q. How do you ascertain that you have taken a reading? How do you take a reading?

A. Adjust the sight box so that the intensity of the 38270
light as shown on the screen in the sight box is the same.

Q. It is the light from the candle and the light from the gas?

A. The light from the candle and the light from the gas.

Q. You move the sight box along the bar?

A. Yes, sir.

Q. When you have taken the test, what do you do after that?

A. Why, after I have my 10 readings and the time of the burning of the candles is taken and the rate of the meters taken, the temperature of the gas, the 38271
reading of the barometer is taken, why, I start to figure out the candle power of the gas.

Q. And how do you do that?

A. By means of tables which have been worked out according to the gas rules, and applying them to the various temperatures and pressures and figures that I got during the test.

Q. What corrections do you make?

A. Why, I make a correction for the rate of burning the gas, the temperature of the gas, the barometer—

38272 Sydney Straus, Direct.

Q. The pressure of the air?

A. Well, yes, that is the pressure of the air, the barometer; the rate of burning of the candles.

Q. What kind of candles do you use?

A. We use standard candles; that is, six to the pound, known as British candles.

Q. Where do you get those candles?

A. Why, we have been receiving them from the American Reading Company.

Q. Have you ever been acquainted with gas testing at any other place besides the Department of
38273 Water Supply, Gas & Electricity?

A. Yes, sir.

Q. Where?

A. The Brooklyn Union Gas Company.

Q. Did they use the same system there?

Mr. Ransom: Objected to as incompetent.

The Master: Sustained.

Mr. Clark: Exception.

Q. Have you ever seen gas tested in any of the works of the Consolidated Company?

A. No, sir.

Q. Have you ever seen it tested at the Grand Street station of the Consolidated?

38274 A. Why, I believe I have had occasion to check up—

Mr. Ransom: I object to that. The answer is not responsive.

Q. Have you ever seen it tested there?

A. Well, I do not quite understand what you mean by seen it tested there.

Q. Have you ever seen any man test gas there? Do you know what kind of apparatus they use?

A. Why, yes, as far as I can remember I conducted a test—

Mr. Ransom: I object.

Mr. Clark: Let him finish his answer.

The Master: Let him answer.

Mr. Ransom: I think the question would call for yes or no.

The Master: Why, he started to say his recollection is that he remembered the apparatus that he used. Is that what you started to say?

The Witness: Yes.

Q. What apparatus did they use at the Consolidated station?

A. I think it is about the same type as we use, an 38276
open bar, 60-inch.

Q. It is the same standard make, is it, do you know?

Mr. Ransom: Objected to as incompetent.

The Master: I will allow him to state.

Mr. Ransom: Exception.

A. The same; I think so.

Q. You think it is?

A. Yes.

Mr. Ransom: I move to strike out the answer as incompetent.

The Master: Motion denied.

Mr. Ransom: Exception. 38277

Q. I show you certain sheets, and ask you what they are (handing witness)?

A. These are reports submitted by me of tests taken at the Grand Street station.

The Master: This is 1919, all of them?

Mr. Clark: 1919, yes.

Q. Are these tests or those reports accurate representations of the tests which you have made?

A. Yes, sir.

Q. The tests made were in accordance with the method which you have just described here?

A. Yes, sir.

38278 Sydney Straus, Direct.

Q. And the tests made were accurate to the best of your knowledge and ability?

A. Yes, sir.

Q. Were these sworn statements made on the same day or shortly after the tests themselves were made?

A. Yes, sir.

Mr. Clark: I offer those in evidence.

Mr. Ransom: I object on the grounds previously indicated as to the Grand Street and Bowery tests. On the further ground that the qualifications of the witness have not been shown,

38279 and the further objection I make as to these and as to all other tests, that these reports do not note the observed candle power, they note a candle power which is readjusted according to the various factors—some of the witnesses say they readjust for some things, and some of the witnesses say they readjust for others—and that these readjustments, what they call corrections, are made on the basis of logarithmic tables whose accuracy and dependability have not been shown.

The Master: I will overrule the objection. I have already given a number AA-432 to Grand Street 1919 reports.

38280 Mr. Clark: Yes.

The Master: These will be considered part of that same exhibit.

Mr. Ransom: Exception.

The Master: I did want to ask Mr. Straus a question, but I have forgotten it.

Mr. Ransom: May I see these reports?

Mr. Clark: Yes (handing counsel).

By the Master:

Q. Do you report in any form the observed candle power?

A. Yes, sir.

Q. On sheets other than these sworn reports?

A. Yes, sir.

Q. Where are those?

Mr. Clark: To whom do you report that?

A. Well, that is reported on the sheet we call the test sheet.

Q. The test sheet?

A. Yes.

Q. What is the difference between the observed candle power and the corrected candle power, as you report it?

A. The candle power obtained by making these 38282
various corrections that I spoke of.

Q. Does that reduce the observed candle power?

A. Not in all cases.

Q. In most cases?

A. Well, I could not say offhand. It all depends upon the different factors.

Q. The gas that you test is running through this meter at the rate of five cubic feet an hour; is that right?

A. Yes.

Q. And the candle is burning at the rate of 120 grains an hour?

A. Yes, sir. 38283

The Master: Where is the statute; has anybody got it here?

Mr. Ransom: I will get it for you.

The Master: You proceed with your questions, then I want to ask him with reference to it.

Mr. Clark: I have some more things to offer.

The Master: Go ahead. I thought you had finished.

By Mr. Clark:

Q. Would the observed candle power be a correct statement of the candle power of the gas?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Chambers: You asked him that about observed.

The Master: I know it, but I am not going to have his conclusions as to whether it is correct or not.

Q. Are there always variations or very generally variations in the—

The Master: No, the trouble with it is this, Major, so you will understand what is in my mind. I have not the statute clearly in mind 38285 here, but the statute, like many statutes that are drafted and put upon the books, is not carefully drafted; it makes no provision for corrected candle power, it says nothing about the temperature of the tests or barometric tests; it simply says that the test is against a candle burning up 120 grains of spermaceti per hour as against gas running through at the rate of five cubic feet an hour. I have forgotten what other element there is. Those are the only elements that the statute gives. What right has the City to correct any test made on that basis?

38286 Mr. Clark: But it has a right to correct the rate of the candle power, of course.

The Master: I doubt it. They are supposed to use a candle that properly and accurately burns 120 grains.

Mr. Ransom: And they are supposed to use candles that weigh six to a pound and not trim them off, cut them in two, or whittle them up.

The Master: That is the trouble with it.

Mr. Clark: Every statute should be reasonably construed.

Mr. Chambers: Why strain to find some flaw that does not exist in the statute?

38287

Mr. Clark: No two candles will burn exactly alike.

Mr. Chambers: There seems to be an effort here to find some pin-headed flaw.

Mr. O'Brien: Your Honor, you are expressing a conviction now.

The Master: That is what I am here for.

Mr. O'Brien: All right, I want it noted. You have been expressing them right along.

The Master: That is what I am here for.

Mr. O'Brien: Well, I want it noted. All through this case you have been expressing convictions. Decisions of judges mean nothing to 38288
you.

The Master: Not unless I think they are right.

Mr. O'Brien: I never met an iconoclast like you.

The Master: Then it is time you did. Go ahead, Major Clark.

Mr. O'Brien: The statutes are drawn—

The Master: What?

Mr. O'Brien: The statutes are drawn poorly and defectively.

The Master: That is common knowledge.

Mr. O'Brien: There is a statute on the books and it states certain requirements. 38289

The Master: Yes, and that is what I say, all I can take is a test on those requirements. There is not a word in there about temperature or barometer or anything else.

Mr. O'Brien: You have been dealing with tests. You were not so critical when they spoke about the tests at the works. You took Mr. Woods' word for it. I have got testimony that you said there the day that they brought Mr. Woods back on the stand—I have testimony in the case now that shows me that it is such and such a candle

38290 power at the works, and Mr. Woods' testimony that that candle power at the works would produce a certain candle power out on the district. Now, you took that right off the reel, your Honor, as a conclusion at that time.

The Master: I had to.

Mr. O'Brien: You did not get into a critical examination as to how they made their tests.

The Master: Did you?

Mr. O'Brien: Did I?

The Master: Yes.

Mr. O'Brien: We went pretty carefully into
38291 that, if you recall.

The Master: All right, then it was not necessary for me to do it. Go on, Major Clark, ask your question. You won't get anywhere arguing with me, Mr. O'Brien; what is the use? I have the last say.

Mr. Chambers: I want to say on behalf of the people I represent I do not think the Court ought to strain and struggle and try and find some flaw in this proof when it clearly appears they have violated the law.

The Master: I think I shall have to strike out all these exhibits when I come to decide the case.

38292 Mr. Chambers: You may strike out the entire defense; that won't make it a bad defense.

The Master: I think I shall have to strike out all of the exhibits which I have received, just showing the corrected candle power results. Now, that is my present disposition. I am going to take all this and pass on it after I have heard argument and am ready to pass on the case.

Mr. Clark: I assume your Honor received the test sheets?

The Master: I have indicated what I think you ought to have.

Q. Mr. Straus, I show you certain other papers and ask you if you will state what they are (handing witness)?

Mr. O'Brien: I do not know whether you know it, your Honor, but these tests and this whole system of gas testing, the logarithms used and the corrected sheets used—

The Master: You ought not to do that; we are waiting for an answer. You make a statement and you break right in between.

Mr. O'Brien: All right, I want to say to your Honor—it was brought out yesterday, but you 38294
show it, you are making up your mind, you are reaching a conviction as to these tests, as to whether or not they show noncompliance with this statute. I think you ought to know this whole system was arranged by Dr. Love, a man of acknowledged standing in this business and afterwards the head of that branch of the Consolidated Gas Company.

The Master: Now, do you recall the question?

The Witness: Yes, sir.

The Master: What is it?

Mr. O'Brien: You can strike that from the record, but I think you ought to know it. We 38295
will bring it out in the proof.

A. These are reports made up—

Mr. Chambers: May I for the purpose—

The Master: You may do nothing until I get this answer. Stop it.

Mr. Chambers: Exception.

By the Master:

Q. What are these?

A. Reports made by me of the results of the tests taken on the separate days.

Q. The corrected results, as you have testified?

A. The corrected results.

38296 Sydney Straus, Direct.

By Mr. Clark:

Q. Were those made in the manner in which you have testified—the tests that are recorded there were made in the manner you have testified?

A. Yes, sir.

Q. And those sheets accurately record the results of the tests so made?

A. Yes, sir.

Q. Were they sworn to on the same day or shortly after the tests were made?

A. Yes, sir.

38297 Q. And the tests were accurate to the best of your knowledge and ability?

A. Yes, sir.

Mr. Clark: I offer those in evidence.

The Master: I take it that counsel for the complainant makes the same objection, and I will overrule it for the time being and receive these. These are part of the 1918 test reports at the Grand Street and Bowery station, and will be received as Defendants' Exhibit AA-433, which will be the number to cover the various testing reports for that station.

38298 Mr. Ransom: That covers 1918. I add to my previous grounds of objection that under the undisputed testimony in the case the months of January and February, 1918, were periods of abnormal and severe cold weather and difficulty in the supply of gas, at a time when the frost in the ground penetrated below the main, so that the company was dealing with an unusual and abnormal condition.

Mr. Clark: I object to Judge Ransom testifying.

The Master: He is not testifying, and this whole statement is a useless waste of time; be-

cause it is not an objection going to the paper, it is an explanation that has got to be proved.

Mr. Ransom: It is a condition to which the ordinary test did not apply. Further, that the month of April and through the remaining portion of the year was a period when the plants of the company were being operated under the direction of the United States Government, its War Department controlling the use of oil and the candle power sent out from the holders, and the period of time necessary for getting these dry mains back in condition; so the company 38300
then was operating under unusual conditions.

The Master: I have made my ruling. Next question.

Mr. Ransom: Exception.

Q. Mr. Straus, why are corrections made for temperature?

Mr. Ransom: Objected to as incompetent.

The Master: I will take it.

Mr. Ransom: Exception.

A. Well, the volume of the gas varies directly as the temperature of the gas. Therefore, in order to obtain the right volume you are working under you always have to know the temperature you are work- 38301
ing at.

Q. Does that affect the rate at which the gas flows?

A. Why, yes, because the rate takes in the number of cubic feet, and that is volume.

Q. In order to ascertain that the gas is flowing at the rate of five feet per hour, you consider it necessary to correct the gas to a uniform temperature. What temperature do you correct it to?

A. It is corrected back to 60 degrees, or around that.

The Master: I thought your meter showed how fast the gas was flowing?

Mr. Ransom: He said they made corrections according to the rate of flow.

The Master: No, but I understood the meter was adjusted so that it allowed the gas to flow at the rate of five cubic feet an hour. Didn't you say that?

The Witness: Well, it is adjusted at that temperature, at five cubic feet an hour.

The Master: Yes.

38303 Mr. Ransom: That is at 60 degrees.

The Master: Yes.

Q. Does the meter adjust the temperature itself; does the meter make an adjustment for temperature?

A. Why, no, there is a thermometer on the meter and that gives the temperature that you are working under. It might be 70 degrees, it might be 50 degrees.

The Master: But let me ask you Mr. Straus, the gas that you are testing without correcting or adjusting any figures is flowing through that meter, whatever its temperature may be, at the rate of five cubic feet an hour, is it not?

The Witness: At that temperature, five cubic

38304 feet at that temperature.

The Master: Yes.

Mr. Ransom: At 60 degrees.

Mr. Clark: That is not five cubic feet at 60 degrees, is it?

The Witness: No.

The Master: But where is there anything in the statute that says that?

Mr. Clark: Five cubic feet at 120 degrees would be twice as much gas as at 60 degrees.

The Master: But where is there anything in the statute that says it should be tested at a cer-

tain temperature? How am I to know that 60 degrees was the temperature that this legislature had in mind?

Q. Is that 60 degrees the temperature that is usually assumed or taken for the measurement of gas?

The Master: Objection sustained. I am talking about a statute.

Mr. Clark: Exception.

The Master: How am I to assume what this legislature had in mind?

Mr. O'Brien: It has got to be taken in conjunction with the whole of the gas making business and the results of the investigation made by 38306
the Commission whose report was the basis of this statute, and to which reference may be made for an interpretation of the statute, your Honor. You might ask with the same reason—you are depending on one of the vital things in this case as the total send-out, is it not? Now, is it a corrected send-out, it is calculated send-out; you are guessing at it if you say that they have not any right to bring in an adjustment.

The Master: I will guess at some things, but I will not guess at a result on which a highly technical and penal statute depends. 38307

Mr. O'Brien: I say to your Honor that in regard to the correction of the send-out, all of the gas in all of these gas works is of greater volume, the send-out is greater than what they say it is. They have in all their manufacturing books, or what are called manufacturing results, taken the actual send-out and made a calculation as per tables to reduce it to 60 degrees.

The Master: But I am not discussing that now.

38308 Sydney Straus, Direct.

Mr. O'Brien: You cannot understand the drift of what I am saying?

The Master: Yes.

Mr. O'Brien: The point of what I am saying is that they have resolved in all these gas companies, in all the works of the complainant company—they have resolved the actual send-out to a basis of 60 degrees temperature.

The Master: But you do not understand what I am saying. I am talking about a statute.

Mr. O'Brien: Not only that, your Honor, but
38309 in the question of the calculation of the consumers' meters you are going to make a finding here that will to some extent include the total send-out and the total amount reported to be sold by the consumers' meters. The send-out is regulated to 60 degrees standard by the corrections made at the works, while the Gas Company comes along and sticks their meters up in the kitchens of the houses of New York City, where they are close to ranges, where they are close to stoves, and where the result is not affected, and yet the sum total of all those meters is taken as they are read by the meter readers.

38310 The Master: Next question, Major Clark.

Mr. O'Brien: So you can see from all these things I say they are matters within the purview of the investigation that preceded the enactment of this law, and you can look to the report made by the Commission that framed this law for an interpretation to be given the statute itself.

The Master: Next question, Major Clark.

Q. For what purpose is the correction for barometric pressure made?

A. Well, the volume of the gas varies with the pressure to which it is subjected.

Q. And to what standard barometric pressure do you correct it?

A. Thirty inches.

Q. At a barometric pressure of thirty inches you would find, then, that the gas flowed at a rate of five cubic feet per hour?

Mr. Ransom: I object to the question as vague and meaningless.

Q. (Continued.) That is, is the purpose of the barometric correction to correct the flow of the gas to five cubic feet per hour?

A. Why, yes, just the same as the temperatures, the correction of temperatures. 38312

Q. The barometric pressure corrects the amount of gas that flows, the same way as the temperature does, or the opposite way?

A. That is not the same way. The volume of gas varies inversely as the pressure to which it is subjected or as the temperature varies directly.

Q. Would it be possible to take accurate and uniform tests without correcting for barometric pressure or temperature?

Mr. Ransom: Objected to as incompetent, calling for a conclusion that the witness is not competent to draw. 38313

Mr. O'Brien: The witness is a graduate of a polytechnic school.

Mr. Ransom: You should at least have added the International Correspondence Schools

Mr. Ransom: I did not think of that. I would not sneer at that. There are a lot of people that have not had the education you have, but who have risen to some height.

The Master: I do not want to appear peevish, but if you gentlemen are going to take much

time in this discussion I will go out in the hall and smoke a cigar. I shall allow this question.

Mr. Ransom: Exception.

Q. Would it be possible—

The Master: He has not answered it.

Mr. Clark: Read the question.

(Question read as follows):

Q. Would it be possible to take accurate and uniform tests without correcting for barometric pressure and temperature?

A. No.

38315 By the Master:

Q. That is, it would not be uniform?

A. Well, I think the question was "accurate."

Q. Yes.

A. I would not consider it accurate.

Q. Well, it surely would not be uniform?

Mr. O'Brien: Without the barometric pressure being taken.

A. It would not be final.

The Master: Proceed, Major Clark.

By Mr. Clark:

Q. Can you state whether 60 degrees as to temperature and 30 inches as to barometric pressure are

38316 the common standards for the measurement of gas?

Mr. Ransom: Objected to as incompetent. The witness certainly does not know that.

The Master: I will sustain the objection.

Mr. Clark: Exception.

Q. Do you know what standards as to temperature and—

The Master: I will let you ask him why he took 60 degrees in temperature and 30 inches barometric pressure.

Mr. Clark: This man is an expert, your Honor.

The Master: Ask him why he did it.

Q. Why did you take 60 degrees temperature and 30 inches barometric pressure as a standard?

A. Well, those were the conditions under which I always worked, and besides I happened to read some literature published by the Bureau of Standards which gives those conditions.

By the Master:

Q. In the first instance you did it because you were told to do it that way, were you not? 38318

A. Yes.

Q. Those were the instructions, to test, on that basis?

A. Yes.

Q. And to correct on that basis?

A. Yes, sir.

Q. That is why you did it in the first instance?

Mr. O'Brien: I object to his Honor arguing with the witness again.

Q. There is an unanswered question, Mr. Straus. Is it the fact that when you started to test the gas as a gas inspector in the employ of the City, that you corrected your make on the basis of 60 degrees temperature and 30 inches barometric pressure because those were your instructions? 38319

Mr. O'Brien: I object to the Master putting that question to the witness.

The Master: The objection is overruled.

Mr. O'Brien: Exception.

The Master: Answer the question.

A. Why, I believe so, yes.

By Mr. Clark:

Q. Those were your instructions?

A. As far as I remember.

38320 Sydney Straus, Direct.

Q. From your knowledge of the gas industry, did you question the accuracy or the propriety of those instructions?

Mr. Ransom: Objected to as incompetent.

The Master: Overruled

Mr. Ransom: Exception.

The Master: You can answer that. Did you think the instructions were right?

The Witness: I did.

Mr. Ransom: Exception.

Q. Did you believe that was the proper temperature
38321 and the proper barometric pressure?

The Master: I won't allow any more of it.

Mr. Ransom: Objected to.

The Master: Objection sustained; it is already covered.

Q. Do you still believe that?

Mr. Ransom: Objected to as immaterial.

A. Yes, sir.

Q. Do you know whether the tests made by the Consolidated Gas Company are corrected in this way?

Mr. Ransom. Objected to as incompetent.

The Master: I will allow it

Mr. Ransom: Exception. The witness has af-
38322 firmatively shown that he did not know it.

The Master: He is asked whether he does know.

By the Master:

Q. Did you ever see the Consolidated Gas testing man correct his make and figure out these things?

A. No, sir.

Q. Then you do not know what he does?

A. No, sir.

The Master: The witness says he doesn't know what the Consolidated man does.

Q. I show you some papers and ask you what they are?

A. These are reports of tests that I have taken at Grand Street station.

The Master: What year?

The Witness: 1917.

Q. And those which you signed were taken by you?

A. I notice there are some here—

Q. That is, those that you have signed were taken by you?

A. Yes, sir. 38324

Q. And those that you have signed accurately represent tests made by you?

A. Yes, sir.

Q. In the manner you have described?

A. Yes, sir.

Q. They were sworn to on the same day, or shortly after the actual tests were made?

A. Yes, sir.

Q. And were the tests accurate tests of the gas, to the best of your knowledge, information and ability?

A. Yes, sir.

Mr. Clark: I offer such of those as are signed by Mr. Straus in evidence. 38325

Mr. Ransom: I make the same objection as before with respect to the offer in general, and the same specific objections to tests that the particular testing stations, and during particular periods of 1918 and 1919?

The Master: Do you remember the 31st day of December, 1917?

The Witness: I remember that it existed.

The Master: Do you remember that that was the day that the thermometer got to about 12 or 13 below zero.

38326 Sydney Straus, Direct.

Mr. O'Brien: I am going to object again to the Master undertaking to cross examine the witness, I am going to object on the further ground that if it was addressed even by counsel it would be irrelevant, incompetent and immaterial.

The Master: Objection overruled.

Mr. O'Brien: Exception.

By the Master:

Q. Do you recall that day?

A. No.

38327 The Master: Well, these will be received in evidence over the objections of counsel for the complainant, and will be considered as Exhibit AA-434, being the 1917 test reports for the Grand Street station.

Q. Would the fact, Mr. Straus that the thermometer was away below zero on the 31st of December, 1917, affect the test as to the candle power at all?

Mr. O'Brien: I make the same objection as I made before.

The Master: Same ruling.

Mr. O'Brien: Exception.

A. I believe it would, yes.

38328 The Master: The Master will take judicial notice of the fact that the 31st of December, 1917 was the coldest day that the City of New York had experienced in the forty-six years of the Master's life, at least, and his recollection is that it was 13 degrees below zero that day.

Mr. O'Brien: An abnormal day.

The Master: Yes, and the result was probably abnormal.

Mr. Clark: The statute was running.

By Mr. Clark:

Q. Mr. Straus, I show you certain other papers and ask you what they are?

A. These are reports, some of them are reports—

The Master: For what year?

The Witness: 1916.

The Master: I will not take any proof of tests back of January 1, 1917, simply to limit the record. I do not think it is necessary to go back of that date.

Mr. O'Brien: Your Honor, we are going back to 1912, we are going to show it was the common practice with this company—

The Master: How are you going to go back to 1912 if I won't let you?

Mr. O'Brien: We are going to do it with 38330
your shutting it out and with our exception on the record.

The Master: There isn't any sense at all in wasting time making offers there.

Mr. O'Brien: That can be done very briefly.

The Master: It is going to be done now.

Mr. O'Brien: We can make our offer—

The Master: You can make your offer. The counsel for defendants now offer report of this witness for the year 1916.

Mr. Ransom: I object to it.

Mr. Chambers: And for 1915, 1914, 1913, and 1912. 38331

The Master: And the Master rules that he will not take any reports of tests made prior to the 1st day of January, 1917, in order to limit this trial so far as this point is concerned.

Mr. Chambers: We offer all these reports in evidence for all these years and also the observed candle power for those years, made by this witness, and we say for the record that these will show repeated violations, month after month and year after year

38332

Mr. Ransom: A dastardly statement by the Attorney General of this State, a dastardly statement.

Mr. O'Brien: I join in that dastardly work by saying, your Honor, that the purpose for introducing years prior to 1917 is to show your Honor that the violations of the law was not peculiar to a war time period, but that it existed over a long time, that they were continual violators of the law during the period that they have alleged in their complaint that this statute was confiscatory. It is therefore part of this case.

38333

It goes back into the years that are in controversy here, concerning which proof on other points has been offered. It shows the purpose of the company, it shows that they are not in equity with clean hands, but with dirty hands, and with fraudulent hands; and we will show you further, the defendants will show you, the importance of having the whole story in, because you yourself have already begun to argue about the distressful weather of the winter of 1917-18. You have already given us some impressions as to what is in your mind of the effect on this situation of contracts made with the United States

38334

Government—

The Master: That is enough.

Mr. O'Brien: The Master will not hear any more?

The Master: No.

Mr. O'Brien: I take an exception to your shutting off my statement.

The Master: In view of the statements made by counsel for the defendants which, in the view of the Master are recklessly made, the Master will overrule the decision just made, and will take

the 1916 reports that are offered. They will be Exhibit AA-435.

Mr. Clark: We have not laid the foundation for them.

The Master: I thought you had.

By Mr. Clark:

Q. Mr. Straus, are those reports, so far as they are signed by you, correct representations of tests made by you in the manner in which you have described.

A. Yes, sir.

Q. Were they sworn to by you on the day, or shortly after the actual tests were made? 38336

A. Yes, sir.

Q. Were the tests made accurate to the best of your knowledge and ability?

A. Yes, sir.

The Master: Now, the witness's report for 1916 are received as Defendants' Exhibit AA-435, under the objections already stated to the other reports. The Master, however, will adhere to the ruling as to any report prior to January 1, 1916.

Mr. Ransom: I wish to state my objection in addition to what I have already said. Here is a period during which the mains of this company 38337 were exposed throughout the Borough of Manhattan, Lexington Avenue, Broadway—

The Master: The reports show that the candle power test in most of the tests was over 22, so what is the use of wasting time?

Mr. Chambers: Does your ruling mean that you will not take observed candle power for any time prior to January 1, 1916?

The Master: That is my ruling, and I allow an exception.

38338

Mr. Chambers: There isn't any use of our bringing the proof here?

The Master: There is no use of our offering it.

Mr. Chambers: And that you will not take any candle power tests—

The Master: Prior to January 1, 1916.

Mr. Chambers: For any year?

The Master: For any year.

Mr. Chambers: I take an exception.

Mr. Clark: Exception.

Mr. O'Brien: Exception.

38339 The Master: I am doing that in the exercise of my discretion for the purpose of limiting the issue.

Mr. Chambers: I would like to say for the record that we urge the Court to take such proof, we are ready to offer it, and we are anxious to offer it.

The Master: You have said that before.

Mr. Chambers: We know they bear out what we have said.

The Master: The statement as to what it will bear out, is stricken from the record.

38340 Mr. O'Brien: Your Honor will note that we believe the complete story should be told so you will have all the facts before you, and if there is any benefit to the company to be gotten out of those facts, they may have the benefit of it, so that it may not be asserted that the reports are for an isolated period. To show the whole history, the whole story of the company is one of the purposes for which we offer these reports for the period referred to.

The Master: I think the period of 1916, 1917, 1918 and 1919 will amply present the situation.

In view of the fact that this case is now in its eighth month, there must be a limit to some of this proof. Anything else for Mr. Straus?

Mr. Clark: I think that is all.

CROSS-EXAMINATION BY MR. RANSOM:

Q. Mr. Straus, all these tests are made in a dark room?

A. Yes, sir.

Q. At the Grand Street and Bowery Testing Station of the City have you what are known as bleeders? Do you know what they are, bleeders?

A. Bleeders? 38342

Q. Yes—you don't know what they are?

A. No.

Mr. O'Brien: Who originated that term?

The Master: Next question, Judge Ransom.

Q. Any kind of blowoffs for removing gas before you start the tests?

A. Why, not at that station. We always purge—

Q. You simply purge?

A. Yes.

Q. That is, in general, the apparatus at Grand Street and the Bowery is like what you used at 79th Street?

A. As far as I remember there is no blowoff 38343 there.

Q. What is the function of the water level?

A. That allows one to tell just whether your meter is adjusted right, so that the mark which you have to indicate the level really is at the right place.

Q. Supposing the level were too high, what would be the effect?

A. If the level were too high, that would show that you would have to take some water out to get it down to your calibrated mark in order that you

would be able to pass five cubic feet through it, that is, five cubic feet an hour through it, and have right conditions at the meter.

Q. That is, if the water level were too high the meter might register five feet passing through per hour, but there would not in fact be five feet?

A. No.

Q. That is correct, isn't it?

A. Yes.

Q. So, one of the things that has to be done is to see to it that the water level is correct?

38345 A. Yes, sir.

Q. Now, what is the function of the governors, the dry and the wet?

A. The dry governor cuts down the pressure of the gas as it comes off the pipes, and allows it to pass through the meter more uniformly.

Q. You have to see that that is adjusted correctly?

A. Yes, sir.

Q. And the same thing as to the wet governor?

A. The wet governor takes care of the gas after it comes out of the meter, and takes care of any fluctuations that take place in the meter.

Q. In other words, the pressure, the rate at which

38346 the gas goes through, has an effect on the observed candle power?

A. Why, it does, that is, the control at the meter, so you get your five cubic feet.

Q. If your meter registers five cubic feet, or at the rate of five cubic feet per hour, is it always certain that you have five cubic feet passing?

A. Well, you have to correct for the temperature and barometric pressure on that to get your right volume.

Q. Now, you do make a correction in the observed

candle power, you say, for the rate of the burning of the gas?

A. Yes.

Q. Do you have a table for that?

A. Yes, sir.

Q. Were any tables ever given you by anyone covering readjustments or corrections of anything except 60 degrees temperature of gas, and 30 inches of barometric pressure?

A. There is a table for the correction of the number of grains of sperm burned at the candles.

Q. But so far as corrections of temperature and 38348
barometric pressure are concerned, the 60 and the 30 tables are the only tables that you have?

A. Why, there is a correction for the rate of gas itself.

Q. Yes, that is another thing.

A. The meter is always regulated so that you burn your five cubic feet.

Q. That is, you regulate it?

A. Yes, sir.

Q. That is another of the things that you have to do?

A. Yes, sir.

Q. But so far as readjustment or correction tables 38349
on temperature of gas and barometric pressure are concerned, the 60 and the 30 tables are the only tables you have, is that right?

A. There is a table for the rate of gas, and a table for the rate of burning of the candles.

The Master: What Judge Ransom means, the basis of the tables for the correction on barometric pressure and temperature are 60 and 30?

The Witness: Yes, sir.

The Master: You haven't any other tables for that on some other basis?

The Witness: No, sir.

The Master: That is what you wanted, isn't it?

Mr. Ransom: Yes, that is what I wanted.

Q. Now, during 1917, 1918 and 1919 did you have trouble with respect to the quality of the candles?

A. Why, at times they would not burn the right rate, and we generally used another pair of candles.

Q. Now, suppose that you found in the course of a test, in this darkened room, that your candles had burned at the rate of 128 spermaceti per hour, would

38351 you record such a test?

A. Well, if it was not too far out of the way—

Q. I said 128.

A. What would that be in minutes?

Q. I am asking you?

A. I generally took it from the number of minutes rather than the number of grains of sperm burned.

Q. Supposing you found that your candles had burned at the rate of 128 spermaceti per hour, would you record such a test?

A. I couldn't say offhand, because I am used to looking at it from the number of minutes, that is, if it burns say within 9.40 or 10.60—

38352 Q. What do you mean by that?

Mr. O'Brien: Just a minute, there is a unfinished sentence when he broke in.

The Master: Take your seat.

Mr. O'Brien: I object to it.

The Master: What do you mean by 9.40 or 10.60?

Mr. O'Brien: Go ahead and finish your sentence.

The Master: The witness will be controlled by the Master, not by any counsel in this case. What do you mean by 9.40 and 10.60?

The Witness: That is the limits within which —that is, 9.50 minutes, and 10.50 minutes, are the number of minutes that the candles are supposed to burn.

The Master: Burn what, burn how much?

The Witness: Burn during the tests, the 120 grains of spermaceti.

The Master: Well, it is 120 grains of sperm an hour, isn't it?

Mr. Ransom: At that rate.

The Master: Yes, at the rate of 120?

The Witness: Yes. 38354

The Master: How many grains would that means for the 9.40 or 10.50?

The Witness: That would mean for the two candles, 40 grains.

The Master: That is what is in the witness's mind. See if you can't reframe your question so as to get it down to the number of grains that should be consumed in the ten minutes.

Mr. O'Brien: Will your Honor permit the broken answer of the witness to be completed?

The Master: There isn't any broken answer. The trouble with it is that the witness was about to say that he does not figure on 120 grains per 38355 hour, he figures on the time. As I understand it, he figures on about 40 grains being used up in the test.

The Witness: 40 grains in 10 minutes.

The Master: And your test is on that?

The Witness: That is the test.

Q. That is, 20 grains per candle in 10 minutes?

A. 20 grains per candle.

By the Master:

Q. Suppose you had 23 grains in that time would you record the test?

A. I would discard it.

Q. Would you discard it at 22 1/2?

A. Why, yes, that is discarded.

Q. Well, at what point do you discard, how much above 20?

A. Well, as a rule I discard it if it is over the standard.

Q. Over what?

A. That is, 9.50 or 10.50 minutes.

Q. What do you mean by standard?

Mr. Clark: Burning 20 grains in that time.

38357 A. That is the standard rate taken for the burning of candles. The candles are supposed to burn within that period of time.

By Mr. Ransom:

Q. Can you tell how many of these tests which you made and have put in evidence were made when the spermaceti was burning at the rate of 125 to 128 per hour?

Mr. O'Brien: I object to that as incompetent, irrelevant and immaterial. We will produce the testing sheets.

The Master: Objection overruled.

Mr. O'Brien: It is quite manifest that the wit-

38358 ness—he has here hundreds of tests—

A. I can't tell.

Q. Can you tell how many of them were made with spermaceti burning at the rate of 113 to 128 per hour?

Mr. O'Brien: Your Honor, I am going to object to that, because it carries with it—this witness is not accustomed to fencing with an attorney. He has given his statement saying he discarded the test where it showed such and such, and now he is trying to embody something in the

question which carries with it the assumption that there is testimony to that effect. I think it is unfair, it doesn't get anywhere, its unfairness will be in the record. I object to it.

The Master: Next question.

Mr. O'Brien: I take an exception to your Honor's ruling.

A. No.

Q. If the temperature of the gas is above 60, you reduce the observed candle power, do you not?

Mr. Chambers: I object to that on the ground that he has not said that he reduced it. 38360

The Master: Objection overruled. That is what he is asking the witness.

A. You would have to calculate out just what it would do.

Q. Do you know what it would do?

A. On the candle power?

Q. Yes.

A. It would increase the volume of the gas, and that would in turn increase the candle power.

Q. You say it would increase the candle power?

A. Yes.

The Master: Perhaps the witness does not understand the question. A higher temperature 38361 will increase the candle power, will it?

The Witness: Well, I don't know so much that it will increase it, but more that it would tend to keep the candle power where it is at, whereas a lower temperature would tend to lessen the power of the gas holding this candle power.

Q. Supposing this thermometer in this darkened room showed a temperature of the gas of 70 degrees, would that have a higher candle power, a higher observed candle power than if the temperature showed the gas at 50 degrees?

Mr. O'Brien: Your Honor, that is the second time that Judge Ransom has incorporated trickily into his question this darkened room. It is not nice practice, and I object to it.

The Master: Objection overruled.

Mr. O'Brien: It is not manly cross examination of a witness.

The Master: Objection overruled.

Mr. O'Brien: Exception.

By the Master:

Q. I do not understand that the temperature of the
38363 room is taken, is it, Mr. Straus? I understood you to say the temperature of the gas was taken?

A. The temperature of the gas.

Q. How do you take the temperature of the gas?

A. By means of the thermometer on the meter.

Q. Does that thermometer gauge the temperature of the room or the temperature of the gas?

A. The temperature of the gas.

Q. As distinguished from the temperature of the room?

A. Yes, sir.

Q. In other words, if you had your thermometer in this room if your apparatus was in this room—
38364 to get it clear in my mind—it will not give the temperature of the room, but it will the temperature of the gas?

A. Yes.

Q. The temperature of the room would be 70, but the thermometer will indicate the temperature of the gas to be 62, if it is 62?

A. That is right.

The Master: What has the temperature of the room to do with it?

By Mr. Ransom:

Q. I say, suppose the thermometer showed the temperature of the gas to be 70, would that gas have a higher candle power than if the thermometer showed the gas at a temperature of 50?

A. Yes, sir.

Q. To carry that question a step further, if you find that the gas of which you have observed the candle power is at a temperature of 65, you correct that temperature and reduce—you correct the candle power to a reduced temperature and reduce the candle power, do you not? 38366

A. It is corrected to the basis of 60 degrees.

The Master: Well, that reduces the candle power, does it, or does it not?

The Witness: I believe it would, yes.

Q. Do you note or register in any way the temperature of the water?

The Master: You mean in this water level?

Mr. Ransom: Yes.

A. Not that I know of.

By the Master:

Q. You would know whether you do or not, wouldn't you?

A. Well, no. 38367

Q. Why not?

A. I never found it necessary.

Q. Mr. Ransom is asking you whether you ever tested the temperature of the water that was in the water level or not, not whether you found it necessary?

A. I should say, no.

By Mr. Ransom:

Q. If the gas in fact goes through the meter at a rate in excess of five cubic feet per hour, you lower the observed candle power, do you not?

38368 Sydney Straus, Cross.

Mr. Chambers: I am going to object to that upon the ground that it assumes something that is not the fact, that is, as to how the gas goes through. It can't go through that way.

Mr. Ransom: He has not said that.

Mr. O'Brien: You are assuming something that is not in the record.

The Master: Objection overruled.

Mr. Chambers: Exception.

Mr. O'Brien: Exception.

Q. Will you answer the question?

38369 (Question read by stenographer.)

Mr. Chambers: The trouble is the gas can't go through the meters—

The Master: If that is so the witness will say so.

A. I think I have said before that that is regulated at the beginning of the test.

By the Master:

Q. Then your testimony is that it will not go through more than five cubic feet an hour, is it?

A. It don't go through more.

Q. So that no adjustment is necessary for that reason?

38370 A. Well, we might have to test it during the test.

Q. I mean, you don't correct your results because the gas goes through more than five cubic feet an hour, do you?

A. No, we don't have occasion.

By Mr. Ransom:

Q. What do you mean when you say that you make a correction for the rate of burning of the gas?

A. If the gas burns at five cubic feet there is no correction necessary.

Mr. Chambers: I object to that on the ground that he didn't say that.

Mr. Ransom: That is exactly what he said.

The Master: Objection overruled.

Mr. Chambers: Exception.

Q. Did you ever find that gas does burn in excess of five cubic feet per hour, so that you would have to make a correction?

A. I never had to apply the correction that I recall.

Q. Well, you are furnished with a table for making such corrections?

A. Yes, sir.

Q. Are you willing to say that you never have made 38372
a correction on any of these tests for the rate of burning gas?

The Master: I think the witness has answered that. He says that he can't recall; there is no use repeating it.

Mr. Ransom: The witness is not clear on that.

The Master: He says not that he can recall. That is the best you can get.

Mr. Ransom: Well, he said two things.

The Master: He has said a whole lot of things. Let us get the next one. I think you have got enough.

Q. By the way, what is the salary of these in- 38373
spectors?

Mr. O'Brien: I object to that as incompetent.

Mr. Chambers: They are poorly paid, we will have to concede that, probably.

Q. Well, let us get the poor pay then?

A. When I went into the service it was $1,200 a year.

The Master: And it got up to what when you quit?

The Witness: $1,620.

The Master: So you quit?

The Witness: Yes, sir.

Q. How old are you?

A. Thirty-one.

Mr. Ransom: That is all.

RE-DIRECT EXAMINATION BY MR. CLARK:

Q. What is the tendency of the water in the water level? Do you usually have to raise the level in the water level when you begin the tests, or lower it?

A. Have to raise it.

Q. Because of evaporation and other causes?

A. Yes, sir.

The Master: Where do you get the water?

38375 The Witness: I had been using distilled water.

The Master: Where did you get it?

The Witness: In the laboratory.

The Master: Is it in a jar?

The Witness: In a bottle.

Q. What would be the result if water was allowed to be low, below the water level, what would be the result on the candle power?

A. There would be more gas passing through the meters than—

The Master: Five cubic feet?

A. (Continued.) —than the amount that ought to pass at the calibrated standard, and that would not

38376 give you the correct result.

Q. Would it be higher or lower, do you know?

The Master: In candle power, how would it affect the candle power?

The Witness: It would be high.

Q. There would be a higher candle power?

A. Yes.

Q. When you were testifying about the 9.50 and 10.50 minutes, did you mean that you threw the test out if more or less than 20 grains were burned within those limits?

Mr. Ransom: I object to that. That is not what he said.

The Master: I will let him say what he wants to say.

A. As far as I remember that was the case.

By the Master:

Q. I don't quite get this right. Do I understand that your tests range from 9.40 seconds to 10.51 seconds—that that was the range of the time of your tests?

A. Well, if there were any other recorded outside of that time. It would be on the testing sheets. 38378

Q. Was that the usual time allowed for the test, 9.40 to 10.50?

A. 9.50 and 10.50.

Q. Now, if it was 20 grains in 9.50 that would be all right?

A. That is for one candle.

Q. And the same if it were 20 grains during 10.50, that would be all right, would it?

A. Yes.

Q. In other words it didn't make any difference in your tests so long as the 20 grains was burned up in a time not less than 9.50 and not more than 10.50 minutes—is that correct?

A. Why, those were the conditions that we were supposed to work under. 38379

Q. I haven't it clear in my mind. Your tests could not be less than 9.50, could they?

A. They were supposed to range from 9.50 to 10.50.

Q. And if during your test, whether it was 9.50, 9.70 or 10, or 10.20, or 10.40, if 20 grains were burned at each candle you recorded the test?

A. Yes.

Q. And it didn't make any difference whether the test took 9.50 or 10.40, or 10.50?

A. 9.50 minutes—

Q. 9 1/2 minutes then?

A. Yes, sir.

Q. And 10 1/2 minutes?

A. Yes, sir.

Q. So that if each candle burned that 20 grains in 9 1/2 minutes you were satisfied?

A. Yes, sir.

Q. If it burned in 9 3/4 minutes you were satisfied?

A. Yes, sir.

Q. If it burned in ten minutes you were satisfied?

38381 A. Yes, sir.

Q. And if it burned in 10 1/4 minutes you were satisfied?

A. Yes, sir.

Q. If it burned in 10 1/2 minutes you were satisfied?

Mr. O'Brien: These test sheets show all of

A. Yes, sir.

that.

The Master: But I am taking the witness's testimony.

By Mr. O'Brien:

Q. Mr. Straus, when you correct a temperature

38382 from 65 to 60 degrees, is it not a fact that you increase the candle power over the observed candle power?

A. You say correct it from 65 to 60?

Q. Yes.

The Master: Temperature.

A. I believe that is the case.

The Master (addressing Mr. Ransom): Is that right?

Mr. Ransom: He doesn't know.

The Master (addressing Mr. Woods): Does it lower it or raise it?

38383

Mr. O'Brien: I do not think it is right for Mr. Ransom when I am asking the witness a question, trying to hear what his answer is—the question of the Master having been spoken in a low voice to Mr. Ransom, for him to give us his ideas across the board, and Mr. Woods also, and your Honor asking him whether that is right. This is an important element in this case, just as important as any here, and I contend it is not fair to the witness, and it is not fair to me and to the defendants to enter into that discussion with counsel for the plaintiff at your elbow, and with Mr. Woods at his elbow, in regard to whether this 38384
witness is right or wrong, and I except to it.

The Master: Now, Mr. Woods, so that the record will show it, what do you claim the fact to be? Does it increase or reduce the candle power?

Mr. O'Brien: Well, while this witness is here, and in his hearing, I object to it.

Mr. Clark: I object to that while my witness is on the stand.

The Master: I am going to see what Mr. Woods has to say about it, so that Mr. O'Brien will have his exception clearly noted on the record.

Mr. Woods, what do you contend, on behalf 38385
of the company—whether it increases the candle power when you reduce the temperature from a higher to a lower temperature?

Mr. Woods: The calculated candle power would be higher than the observed.

The Master: That is what I understood the witness to say.

Mr. Ransom: He said it was the other way.

Mr. O'Brien: It was a manifest error which I was trying to bring out by a question.

Mr. Ransom: The first time he said it would decrease it.

The Master: Now, Mr. O'Brien, do you still press your exception to my inquiry of Mr. Woods?

Mr. O'Brien: Your Honor, I do. I think it was entirely improper to ask Mr. Woods within the hearing of the witness—

The Master: It is simply another illustration of how the Master can usually get a correct fact.

Mr. O'Brien: When the question was asked, your Honor, you were not aware of what the answer was going to be. I object to what Mr. Ransom said in trying to browbeat this witness.

38387 Mr. Chambers: Why didn't you ask Mr. Hirschewitz.

The Master: Mr. Chambers, if I asked every witness on your side, and they all said it would increase the candle power, and Mr. Woods said it would not, I would not get anywhere; but the minute Mr. Woods, speaking for the company, says that is right, it does increase the candle power, I don't have to waste any more time on it.

Mr. Chambers: I will have to bow humbly, and say that is very cleverly put.

By Mr. Chambers:

38388 Q. Mr. Straus, in making your test for candle power did you find the temperature of the gas more often above 60 than below?

Mr. Ransom: I object to that as incompetent.

The Master: I will allow it.

Mr. Ransom: Exception.

The Master: You may answer that.

Q. Do you understand it?

A. Yes, I understand it. I could not say off-hand, during that long period I was testing. I never took that into note particularly.

Q. If it was more often above 60 than below, that

would invariably tend to increase the candle power, wouldn't it?

Mr. Ransom: I object to that.

The Master: Objection sustained. He has already said that if he corrects from a higher to a lower temperature it increases the candle power.

Q. Could you say whether your observed candle power was lower in more cases than it was higher than your corrected candle power?

Mr. Ransom: I object to that as incompetent.

The Master: That is not allowed. The witness has already stated that he cannot recall, in the 38390
long period of time, whether it was more or less. It is simply repeating the question.

Q. The observed candle power that you took, some records were kept of those

A. Yes, sir.

Q. Do they bear your signature?

A. Yes, sir.

Q. And they were filed away?

A. Yes, sir.

Q. And you could identify them?

A. Yes, sir.

The Master: Anything else, Major Clark?

Mr. Clark: Nothing.

RE-CROSS EXAMINATION BY MR. RANSOM: 38391

Q. If the test showed that 20 grains of spermaceti burned 9 1 2 minutes, that would mean spermaceti burning at the rate of 127 grains per hour, would it not?

The Master: That is a matter of calculation.

Mr. Ransom: Well, doesn't this supposed expert know anything about any of these things.

The Master: You can assume in a question that that is the fact, when you ask him the next question.

Mr. Ransom: Well, I want to see if he knows.

38392 Sidney Straus, Re-cross.

Q. Oh, if you found that the 20 grains had burned in 10 1/2 minutes, that would mean that spermaceti was burning at 113 grains per hour, wouldn't it?

Mr. Chambers: I object to that upon the ground that it is impossible for Mr. Straus to carry those matters in his mind.

The Master: Just figure that out, Mr. Straus, in view of that objection. How many grains per hour will it burn at the rate of 20 for 9 1/2 minutes?

Mr. Chambers: May I say on the record, while
38393 he is figuring that, that I have taken pains to count up the times in 1916—

Mr. Ransom: I object to the statement of counsel.

Mr. Chambers: In which the tests were under 22 and it amounts to—

The Master: The stenographer will not take the statement.

Mr. Chambers: You said I made an extravagant statement, why not let me state it?

The Master: Because the stuff is in evidence.

Mr. Chambers: Yes, and I was just going to tell you what was in it.

38394 The Master: I will see what is in it.

Mr. Chambers: It would be kind of nice to know whether my extravagant statement was wrong or not, and it relates only to Grand Street.

The Master: The record will speak for itself.

Mr. Chambers: Well, it does. How many violations do you think there were in Grand Street?

Mr. Ransom: I object to the suggestion on the part of the Attorney General that there were any violations. The Attorney General, the Corporation Counsel and other officials have never regarded these things as consequential. Do they claim they have not performed their duty?

Mr. O'Brien: The complainant is not relieved by any lax public officials.

(Discussion off the record.)

The Master: Mr. Straus, I have allowed about five minutes for this calculation. Haven't you got it?

The Witness: No, sir, I haven't calculated that.

The Master: It would not take me that length of time. I would divide 20 by 9 1/2 and multiply by 60, and I would get it.

Mr. Ransom: I think that is all. 38396

The Master: Next witness.

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CHARLES A. HILLIG, called as a witness in behalf of the defendants, being duly sworn, testified as follows:

DIRECT-EXAMINATION BY MR. CLARK:

Q. What is your position at the present time, Mr. Hillig?

A. I am a chemist. I am not employed by the City now.

38397

Q. Where are you employed?

A. As a chemist with S. Gumpert Company.

Q. How long have you been out of the City's employ?

A. About fourteen months.

Q. Prior to that time how long were you with the Department of Water Supply, Gas and Electricity?

A. About nine months.

Q. About nine months?

A. Yes, sir.

Q. In what capacity?

A. As a gas inspector.

Q. What is your profession?

A. Chemist.

Q. What education have you had?

A. You mean from the ground up?

Q. Yes.

The Master: No, what chemistry education have you had?

The Witness: At the Cooper Institute, chemical course, graduate in chemistry.

Q. How long?

A. Five years, and two years post graduate course.

38399 Q. Seven years altogether?

A. Seven years altogether.

Q. What degree did you get?

A. It didn't lead up to any degree, graduate in chemistry.

Q. What did you do after you left Cooper Union?

A. Worked as assistant chemist and chemist in charge of laboratories.

Q. Where?

A. Caswell, Massey & Co., Davis & Lawrence—

Q. Various corporations?

A. Yes, sir.

Q. Did you ever study particularly the methods of

38400 testing gas?

A. I did privately, yes.

Q. Before you went into the City employ?

A. Yes.

Q. You are acquainted with the various methods by which gas is tested, or are there various methods?

A. Well, the photometric test, and the caloritic test, for candle power and heat units.

Q. Will you describe in detail the method which you used while in the employ of the Department of Water Supply, Gas and Electricity for testing gas at the Grand Street station?

A. At the Grand Street station I used the standard photometer that they had there.

Q. Will you describe that photometer in detail, and its operation?

A. As I remember it now it is a long graduated bar, at one end of which they had their balance, or apparatus for inserting and weighing the spermaceti candles. This is all in a dark room that this apparatus is set. At the other end is the standard gas jet from the service pipes.

Q. Tell everything that is connected with the photometer and what function it has, and what it does from 38402
the time the gas enters the building until the time you tested?

A. I am coming to it. The gas enters the building through a three-quarter inch riser into the photometer. The gas is lighted. I allow the gas to burn five or ten minutes, so that conditions are about normal, just as the gas is when it is burned in a household.

Mr. Ransom: I move to strike that out.

The Master: Motion granted.

Mr. Chambers: I object.

The Master: He said it burned five or ten minutes. Go on.

Q. Before you take the test? 38403

A. Before I take the test, yes, sir. I prepare my candles. When the candles are burning properly—

Q. How do you prepare your candles?

A. I set two candles in the balance, set them burning until they are burning even, until the flame is at the proper height, and observe the volume through the sight box.

Q. What is the sight box?

A. The sight box is an apparatus that has in the center a mirror, or not a mirror in the center, but rather has a glass on which a piece of paper is put

with a sort of star on it, and on either side there is a mirror, and the light from the candle and the light from the gas strikes the paper, the reflection of the star. When the thing is equal I begin to read the graduations.

Q. Moving the sight box?

A. Moving the sight box.

Q. Until what occurs?

A. Until the lights, that is, the reflection from the light of the candles and the reflection from the light from the gas, are exactly the same, or as nearly as
38405 the human eye can detect.

Q. What do you do after you observe that?

A. I continue that for about—I make readings about nine or ten readings, ten readings.

Q. How far apart?

A. About a minute apart, one minute apart. I make notes of that and then observe how long it takes for the spermaceti candles to burn ten grains, which is usually from nine and a half to ten minutes.

The Master: For 10 grains?

The Witness: You see, I have been out of this thing over a year. Probably 20 grains—120, rather.

38406 The Master: Now, stop and think. You are a chemist. Take your time, don't be in a hurry.

Q. What is the required amount? How many grains do these candles burn per hour?

Mr. Ransom: I object to that as incompetent.

The Master: I will let the witness state, he has other things in his mind.

The Witness: I am thinking how soon I can get out.

The Master: He is in a hurry to get away, and he is not fair to himself. He can do better than he is doing. Take your time.

The Witness: Frankly, I would have to guess, it would be a pure guess. I have been out of the thing for a year now.

Q. The statute calls for candles burning 120 grains per hour. Can you say whether you had such candles?

Mr. Ransom: I object to that as incompetent.

The Master: I am going to let the witness state.

Q. Does that refresh your recollection at all as to the amount of grains that were to be consumed in 10 minutes?

A. Absolutely not, no. 38408

Q. What did you do after you took those 10 tests?

Mr. O'Brien: Will this refresh your memory?

Mr. Ransom: I object to that.

The Master: No, if you have any suggestions to make, make them to Maj. Clark.

Q. Would this refresh your recollection as to what you did after the tests were made (handing paper)?

A. Before I began to make the tests, I got the barometric pressure, and the temperature of the room, that is calculated.

Q. Temperature, where did you get the temperature from?

A. Temperature of the gas, rather. 38409

Q. Yes.

A. The temperature of the gas.

Mr. Ransom: May the record show that Mr. Chambers said yes, prompting the witness.

The Master: Yes.

Mr. Chambers: That is not so, I think you ought to apologize, that is not so.

The Master: An apology is not necessary. The witness's attention was called to the fact that Major Clark—

Mr. Chambers: I was directing my question to Major Clark, looking at him.

Mr. Ransom: I heard it over here.

The Master: Go on.

Mr. Chambers: Just a minute. There is something said on the record that is not right.

The Master: It is right, and it is perfectly proper.

Mr. Chambers: I asked him if the gas, and he said the temperature of the room.

The Master: That is what Mr. Ransom means.

Mr. Chambers: And it is not so, and if the Judge was any kind of a lawyer, he would apolo-

38411 gize to me.

The Master: Have you any other question, Mr. Clark?

Mr. Clark: Yes, sir. He is answering this question.

The Witness: After I made my ten notations, these ten notations of the reading on the bar, I added them together.

Q. Yes, and divided by 10?

A. Yes, and made my computations from that, and from the— We divided by 10, used the observed temperature of the gas.

Q. Candle power?

38412 A. Candle power, rather, we used the logarithmic tables, we had logarithmic tables for the barometric pressure, the temperature of the gas and the number of minutes used for candles, that it took to burn the candles, and—

Q. (Interrupting.) Required number of grains?

A. The required number of grains, yes.

Q. You made all those corrections according to the tables?

A. Yes, according to the standard tables used.

Q. I show you now certain copies of papers, or certain papers, and ask you what they are?

A. These are my daily report sheets of the tests made for the day at the Grand Street station, these are all Grand Street station, sworn to before a notary public.

Q. Do they accurately represent the tests made, in the manner in which you have just described?

A. They do, yes.

Q. And were they sworn to on the same day or shortly after the tests?

A. Sworn to within three or four days afterwards?

Q. And the tests made were accurate tests, according to the method you used, to the best of your knowledge and ability? 38414

A. To the best of my knowledge and ability, yes.

Mr. Clark: I offer these in evidence, for 1918.

The Master: I have forgotten now the exhibit number, but it will take the same exhibit number as the 1918 Grand Street reports.

Mr. Clark: They were not marked.

The Master: Well, no, but the record will show; they will take the same exhibit number, 1918, Grand Street reports were given an exhibit number, and these will have the same number.

Mr. Ransom: I object on the grounds previously indicate as to the other reports of tests of this same character, and on the specific grounds indicated with respect to tests at Grand Street and the Bowery during this period, on the ground that these tests are not made upon the basis specified in the statute, there is no authorization in the statute for observations over a period of 9 1/2 to 10 1/2 minutes, with the variance in the rate of burning spermaceti which they involve; there is no authorization in the statute for testing if there is non-compliance with the statute on a basis of a series of 10-minute intervals of 38415

observation, and the making of an average thereon, that this whole line of proof is incompetent, immaterial and irrelevant, so far as the issues tendered by the answers in this case.

The Master: Objection overruled. Exception allowed. What happened on the 11th of November, 1918?

The Witness: I think that was the date of the armistice, the real declaration of peace.

The Master: Why didn't you make your tests?

The Witness: Because I believe, as my recollection is, that word came downtown that all de-
38417 partments were to close up and to join in some sort of a parade on Fifth Avenue. That is not an official report sworn to.

The Master: As this report of November 11, 1918, is not sworn to, it will not be included in this exhibit. It shows, "No tests made."

Mr. Chambers: Certainly. We do not want anything on that day.

Mr. Ransom: Are they through with this witness?

The Master: Go ahead.

Mr. Ransom: No cross-examination.

38418

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Sol. Frank, a witness in behalf of the defendants, being first duly sworn, testified as follows:

Mr. Ransom: Is that all of this candle power stuff?

The Master: No, there is some more of it.

Direct-examination by Mr. Clark:

Q. Mr. Frank, what is your occupation?

A. I am a gas inspector.

Q. In the Department of Water Supply, Gas & Electricity?

A. Yes.

Q. How long have you been such gas inspector?

A. Since April, 1917.

Q. What chemical education have you had?

A. I am a graduate of the College of the City of New York, 1912, June, 1912. I worked with the Board of Health, Food and Drug Laboratory—

Q. What did you do there?

A. Food and Drug laboratory, worked with a dairy concern in New Jersey as chemist and bacteriologist, 38420
and then came back to the Department of Water Supply as gas inspector.

Q. You have inspected gas at the Grand Street station?

A. Yes, sir.

Q. Will you describe in detail the method that you employed to test the gas there?

A. The first thing I did was to light the five purges we have there on Grand Street, and then turn on any gas I just saw fit, there were five of them and lighted the burner and a little torch flame, started the meter going, and let them run for half an hour at least, sometimes an hour or an hour and a half, until I was 38421
quite certain that the whole apparatus was purged.

Mr. Ransom: I move to strike that out.

Mr. Chambers: No, I object to that.

Mr. Ransom: I move to strike out that he was certain that the whole apparatus was purged.

The Master: I will allow it.

The Witness: I was sure.

The Master: Well, go ahead.

The Witness: Until I was sure that the apparatus was purged, and when I was ready to make my tests I lighted my candles and allowed

the candles to burn at least 15 minutes, 15 or 20 minutes, in the meanwhile of course I saw that my photometer ran five cubic feet per hour, after adjusting the water level on my meter, I saw that my meter ran correctly five cubic feet an hour, and when everything was all right according to my satisfaction, I started my tests. Of course, I saw that the inlet pressure going to the meter, that is from the main to the dry governor, was about one and one-half inches, and that the meter pressure was between .6 to .7 of an inch

38423 pressure at the burner, and then when I saw everything satisfactory, I placed my candles on the scale.

Q. What kind of candles did you use?

A. Well, at one time we used 12 to a pound, another time we used—now we are using six to a pound, in 1917 as I recall we used 12 to a pound and it was changed to 6 to a pound now. The candles were sent over by Great Britain, I think, they are stamped Great Britain on them, and I put my candles on, and when my candles burned right, and by burning right I mean it had a certain shaped flame and had a glow on top at the point, no smoke attached to it, there was no

38424 dark color in the flame at all, we of course do—you are able to tell the flame as your experience grows, and most of my tests, my readings, 10 readings a minute apart, of course, I got the temperature of the gas, got the barometric pressure and also observed the time it took for 120 grains to burn, that is 40 grains to burn 10 minutes, of two candles. After my readings were taken, I took the average of the 10 readings, and with my barometric pressure and gas temperature and spermaceti burn, I calculated my candle power.

The Master: Let me just ask one question. You have got two candles burning?

The Witness: Yes, sir.

The Master: Does that reflect one flame in the mirror or two?

The Witness: It would not reflect any flame, it illuminates the screen.

The Master: But you don't see the flame?

The Witness: I do not see the flame.

The Master: In the sight box at all?

The Witness: I do not.

The Master: Just see the illumination?

The Witness: That is all.

Q. That is, you correct your observed candle power by the logarithmic tables? 38426

A. Yes, sir.

Q. For temperature and barometric pressure, and for the amount of grains that the candles have burned?

A. Yes, sir.

Q. Any other corrections you made?

A. No, sir.

Q. Have you ever had any trouble with your eyes?

A. No, sir.

The Master: What do you do when you use 12 candles to the pound, what do you do, use 2 candles?

The Witness: Yes, sir. 38427

The Master: When was that period when you used 12 candles to the pound?

The Witness: Well, I know it was some time in 1917.

Q. For how long a period?

A. I do not recall. And in 1917, it was changed while I was in the service.

The Master: During '17 or '18?

The Witness: I do not recall; it may have been 1917 or 1918.

Q. Were the candles that were 12 to a pound similar to those that are 6 to a pound?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

The Master: They were a smaller candle, apparently, 12 to a pound, is that the idea?

The Witness: Yes, sir, just half the size.

The Master: In thickness or in length?

The Witness: In length.

The Master: Well, was the thickness of the candle always the same?

The Witness: I do not know.

38429 Q. Did it make any difference in the flame that was given?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Well, here is an expert who testifies as to whether the flame was the same from 2 candles.

The Master: Well, he cannot amend the statute and neither can I, and the statute says 6 candles to the pound.

Mr. Ransom: 120 and not 240 grains per hour.

Mr. Clark: Even so, he can set forth the flame—

38430 Q. Did you cut the candles in two, the 6 to a pound?

A. Yes, sir.

Q. That made them 12 to the pound?

A. Yes, sir.

Q. And when you cut them in two, they were exactly like the candles with 12 to a pound that you had got before?

Mr. Ransom: I object to it as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

The Master: Are they the same thickness.

The Witness: Why, the long candles were made so that they started from one end and were narrower at one end than the other. Of course, the way we cut them we allowed one candle to burn from the thick point to the thin, and the other candle from the thin point to the thick, so they equalized.

The Master: This was on the 12 to the pound?

The Witness: On the 6 to the pound.

The Master: How about the twelve pound?

The Witness: Twelve pound were all alike. 38432

The Master: They were all thinner?

The Witness: I don't know. They looked alike. I never measured the thickness.

Q. You mean like what?

A. They looked alike in size, in thickness.

Q. Like themselves, or like the six?

A. They all looked alike to me.

Q. Except in length?

A. Except in length, and of course I know the short candles do not taper; the long candles do taper.

Q. I show you certain papers and I ask you what they are?

A. Those are my tests at Grand Street. 38433

The Master: For 1918?

The Witness: For 1918.

Q. Are those the accurate representations of the tests that were made by you?

A. Yes, sir.

Q. For the days shown?

A. Yes, sir.

The Master: That is the corrected test?

The Witness: Corrected candle power. They are all correct, yes, sir.

The Master: I mean the corrected candle power not the observed candle power.

The Witness: The corrected candle power.

Q. The tests were made in the manner in which you have just described?

A. Yes, sir.

Q. And the tests so made were accurate to the best of your knowledge and ability?

A. Yes, sir.

Q. These were sworn to on the same day, or shortly after the tests were made?

38435 A. Yes, sir.

Mr. Clark: I offer those in evidence.

Mr. Ransom: Same objection.

The Master: I will receive them as part of the 1918 Grand Street exhibit. Any questions?

Mr. Ransom: No.

The Master: Next witness.

Mr. Clark: Wait a minute. He has some more.

Mr. Chambers: Wait a minute. I want to ask him.

The Master: For what year?

Mr. Clark: 1917.

The Master: For the same station?

38436 Mr. Clark: Yes.

The Master: Well, just show him a batch of them.

Mr. Clark: This is the batch.

The Master: Well, just let him identify his, if he has any in there. Here is one. This one that I have shown you is one of your official tests sworn to for 1917?

The Witness: Yes, sir.

The Master: If there are any others in this which are signed by you before a notary, they are yours, too?

The Witness: Yes, sir.

Q. And they are correct representations of the tests so made?

A. Yes, sir.

Q. And of the tests made in the manner just described by you?

A. Yes, sir.

Q. And you swore to them on the same day or shortly after the tests were made?

A. Yes, sir.

Q. And the tests were accurate, to the best of your knowledge and ability?

A. Yes, sir. 38438

Mr. Clark: I offer such as are signed by him, in evidence.

The Master: Same objection by complainant, same ruling, and it will be part of the 1917 Grand Street exhibit.

By Mr. Chambers:

Q. A record was kept of all of your observed candle powers?

A. Yes, sir.

Q. And are these sworn to by you, or just signed by you?

A. Signed.

Q. And these were preserved? 38439

A. Yes, sir.

Q. Now, do the observed candle power tests without—uncorrected, show the correct candle power of the gas you tested?

Mr. Ransom: Objected to as incompetent.

The Master: I will allow it.

Mr. Ransom: Exception.

A. They do not show the correct candle power.

Q. They have to be corrected in order to show the true and correct candle power?

Mr. Ransom: Objected to as incompetent.

A. Yes, sir.

Q. And that is why they were corrected, isn't it?

Mr. Ransom: Objected to as incompetent.

The Master: Objection overruled.

Mr. Ransom: Exception.

A. Yes, sir.

By Mr. Clark:

Q. Do you know why they used the twelve candles to the pound at the time they did use them?

A. Why they used the twelve?

Q. Yes.

38441 A. I don't know why.

By Mr. Chambers:

Q. From your experience in testing for candle power, do you know or have you any idea of the tests you made, the percentage of candle power tests corrected over those uncorrected, which would show a greater candle power when corrected?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception.

By Mr. O'Brien:

Q. Did you send by mail daily to the Gas Company [illegible] on your testing sheets sworn to, a statement

38442 of the candle power as sworn to by you for each particular day?

Mr. Ransom: Objected to as immaterial, incompetent, no bearing on any issue in this case.

The Master: Objection sustained.

Mr. O'Brien: Your Honor—

The Master (interrupting): I have got the point of your question. Don't argue it. I won't take it.

Mr. O'Brien: Well, I want you to have for your consideration of this matter, the facts, if they be facts, sworn to by the witness on the stand, that

each day there is sent to the Gas Company through the mails, a statement that coincides with the sworn statement of each of these witnesses as to the candle power taken daily. 38443

The Master: I have made my ruling.

Mr. O'Brien: And the action of the company after that is a matter on which you can base such judgment as you see fit. Their failure to complain, to controvert the statement made in the communications through the mail, is a matter from which you can make some legal deductions.

The Master: My ruling will stand.

Mr. O'Brien: The statements made, inscriptions in the manufacturing books at the stations of the company, the inscriptions made there of such tests which Mr. Woods has testified were taken from communications sent by the Department of Water, Gas and Electricity, will show notice to the company of their violations, wherever they have violated the law, with respect to candle power. Now, I propose through the witness to bring out the fact that for each day and every day that he has made a test for the company of the gas of the companies as specified in his sworn statement, and he sends daily through the mails personally himself a notice of this candle power. Other testimony in the case, together with that testimony, will establish the fact, I believe, that the complainant company has acquiesced in the statement of the Department of Water, Gas and Electricity as to the candle power that has been shown. You will couple this, of course, with the evidence in the case, that the complainant company maintains stations of their own. I think it is material, your Honor. You can give it such weight, of course, you will give it such weight as you see fit to give it, but 38444 38445

38446 Sol Frank, Direct.

I think it is certainly competent and material and relevant for us to bring out the fact, if the witness states it to be a fact, that these notices are sent.

The Master: My ruling stands.

Mr. O'Brien: Exception.

Q. I will ask you what notices, if any, you have sent, and when you sent them, of the results of the tests that you have made yourself, of the gas of the company?

Mr. Ransom: Objected to as immaterial and in-

38447 competent.

The Master: Objection sustained.

Mr. O'Brien: Exception. I now call upon the complainant company to produce in court all of the notices received from the Department of Water Supply, Gas & Electricity from 1912 to date, setting forth the result of tests made by the Department of Water, Gas & Electricity of the gas of the complainant company.

The Master: The matter is noted on the record. Any more questions of this witness? You are excused, Mr. Frank.

Mr. Chambers: Yes, I want to ask him one

38448 more question.

By Mr. Chambers:

Q. From your knowledge of the tests you have made, is the observed candle power less in candle power, does it show less candle power, than the corrected candle power?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. Chambers: Exception.

The Master: I have permitted the witness to state as to every day referred to in every report, what the observed candle power was, and

give the details of its correction. I won't let him draw this general conclusion in a general answer of that kind.

Mr. Chambers: Now, about this notice to the company to produce.

The Master: Any more questions from this witness?

Mr. Chambers: No, not yet.

The Master: You are excused, Mr. Frank.

Mr. Chambers: Now, this notice to produce, do you rule that they do not have to produce those?

The Master: I am not ruling on it at all. 38450

Mr. Chambers: Well, do you call on them to produce this? Will you ask them to produce?

The Master: The notice to produce is noted on the record. Next witness.

Mr. Chambers: Well, will you ask them to produce this, or do you require us to serve a notice to produce, or subpoena?

The Master: I will make no direction about it one way or the other.

Mr. Chambers: Wouldn't it save time if you asked them to produce them?

The Master: No, I won't ask them to produce them.

38451

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ROBERT A. WACKER, recalled.

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Wacker, I ask you to state what these papers are?

A. These are reports of tests made by me, and sworn to.

38452 Robert A. Wacker, Direct.

The Master: Where and when?

The Witness: At the Grand Street station from June to September, 1917, Grand Street station.

Q. Are those correct representations of the tests made by you as corrected?

A. Yes.

Q. And the tests were made in the manner which you have described?

A. Yes.

Q. And these were sworn to on the day or shortly after the tests themselves were made?

38453 A. Yes.

Q. And were the tests accurate, to the best of your knowledge and ability?

A. Yes.

Mr. Clark: I offer those in evidence.

Mr. Ransom: Same objection as before, with the specific objections as to the Grand Street station.

The Master: The objection will be overruled. These sheets will be for the first part of 1917, Grand Street station, whatever that number was.

Mr. Ransom: You are going to give us copies of these reports?

38454 Mr. Clark: No, we are not.

Q. I show you other papers and ask you what those papers are?

A. They are reports sworn to during the month of August, 1917.

Q. At what station?

A. At the 79th Street station.

Q. Do those correctly represent the tests which were made at that time by you?

A. Yes, sir.

Q. And the tests were made in the manner you have described?

A. Yes.

Q. And these reports were sworn to shortly after the tests were made?

A. Yes.

Q. And the tests were accurate, to the best of your knowledge and ability?

A. Yes.

Q. And you would say the same thing as to any other reports?

The Master: All of your reports for 1917, 79th Street station?

The Witness: Yes. 38456

Mr. Clark: I offer the reports signed by Mr. Wacker at 79th Street, for 1917.

The Master: No. 1917, 79th Street reports have been received yet.

Mr. Clark: No.

The Master: They will be received as Defendants' Exhibit AA-435 1 2.

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SAMUEL HIRSCHEWITZ, recalled.

DIRECT-EXAMINATION BY MR. CLARK: 38457

Q. Mr. Hirschewitz, I show you a bundle of papers and ask you what they are?

A. These are reports of the 79th Street station from January 3, 1916, to December 31, 1917.

The Master: Were you there during 1916?

The Witness: Yes, sir.

The Master: Well, let us take 1917 first. This bundle beginning January 2, 1917?

The Witness: Yes, sir.

The Master: You offer these?

Mr. Clark: Yes.

38458 Samuel Hirschewitz, Direct.

The Master: Same objection.

Mr. Ransom: I object on the grounds indicated yesterday at 79th Street, and on the further grounds with respect to the year now offered as to the effect of subway construction, and the exposure of mains in Lexington Avenue and other streets, creating an abnormal and unusual condition, as has already been testified in this case.

Q. These tests were made in the manner described?

A. Yes.

38459 Q. And these represent the corrected tests?

A. They do.

Q. And they were sworn to at or shortly after the day the tests were made?

A. They were.

Q. And the tests were accurate, to the best of your knowledge?

A. Yes.

The Master: Well, the objection will now be noted to the offer, after the questions put by Maj. Clark, and the reports of the witness will be received as part of Exhibit AA-435 ½. The balance of these are for January 3, 1916, to December 30, 1916?

38460 The Witness: Yes, sir.

The Master: And you offer these?

Mr. Clark: I offer these.

The Master: Same objection?

Mr. Ransom: Same objection.

The Master: Same ruling, they will be received as Defendants' Exhibit AA-436.

Q. These were made in the same way, sworn to in the same way?

A. They were.

Q. The tests were accurate?

A. They were.

Q. And these accurately represent the tests?

A. Yes, sir.

Q. I show you another paper and ask you what that is?

A. This sheet represents the results of the tests of August 15, 1918, made at 79th Street station.

Q. Was that test made in the same manner?

A. Yes, sir.

Q. Sworn to in the same manner?

A. Yes, sir.

Q. And it is an accurate representation of the tests? 38462

A. Yes, sir.

Q. The test was accurate, to the best of your knowledge and ability?

A. It was.

Mr. Clark: I offer it in evidence.

The Master: You offer this one sheet?

Mr. Clark: Yes.

The Master: As part of the 1918 79th Street report?

Mr. Clark: Yes.

Mr. Ransom: Same objection.

The Master: Same ruling, it will be received as part of the 1918 79th Street exhibit. Is that 38463
all you want of Mr. Hirschewitz?

Mr. Clark: Yes, that is all.

The Master: Next witness.

Mr. Clark: I will recall Mr. Frank for a minute.

38464 Sol. Frank, Direct.

SOL. FRANK, recalled.

DIRECT-EXAMINATION BY MR. CLARK:

Q. I show you certain papers, and ask you what they are?

A. They are my records of tests.

The Master: They are your sworn reports of tests?

The Witness: Sworn reports.

The Master: For what period, September, 1917?

38465 Q. Just a few—

The Master: In 1917?

Mr. Clark: Yes, in 1917.

The Master: 79th Street station?

The Witness: Yes, sir.

Q. Those tests were made by you?

A. Yes, sir.

The Master: You offer these?

Mr. Clark: I offer these.

Mr. Ransom: Same objection.

The Master: Same ruling, they will be received as part of Exhibit AA-435½.

Q. Those tests were made in the same way you
38466 have described and these were sworn to in the same way?

A. Yes, sir.

Q. And the tests were accurate to the best of your knowledge and ability?

A. Yes, sir.

Mr. Ransom: I think Major Clark either ought to give us copies of these, or at least ought to give us some tabulation of them, which we can check with the original documents.

Mr. Clark: They stuck up your nose at a tabulation yesterday.

Mr. Ransom: Well, you make us spend thousands of dollars photostating copies for use.

Mr. Clark: Can you make the legislature spend any money?

Mr. Ransom: Well, you apparently can.

The Master: Anything else from this witness?

Mr. Clark: No, that is all for him. Mr. Birdsley.

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38468

WILLIAM BIRDSLEY, recalled.

DIRECT-EXAMINATION BY MR. CLARK:

Q. Can you state why the Bureau of Water Supply, Gas & Electricity use the candles 12 to the pound in the year 1917?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. During what period did your department use such candles?

A. We used short candles up to 1914, and long candles thereafter, with the exception of around 1917, 38469
the war was going on at that time, and it was very difficult to get any imports from England, and the American Meter Company was unable to get any in, any long candles from England, and they had a stock of short candles on hand, and rather than stop our testing altogether, we reverted to the short candles.

Q. For how long a period?

A. I cannot exactly remember, but it was not very long probably a few months.

Mr. Ransom: They are still using 12 to the pound cutting them in two?

The Master: So when you speak of long candles, you are speaking of six to the pound?

The Witness: Yes.

The Master: When you talk of short candles, you speak of 12 to the pound?

The Witness: Yes, sir.

The Master: And you are still using 12 to the pound?

The Witness: We are using the 6 to the
38471 pound, long candles.

Mr. Ransom: Cut in two?

By Mr. Clark:

Q. Since when? Do you remember when you started off?

A. We started off in the latter part of 1914 using long candles.

Q. Then in 1917 for a few months, you used short candles?

A. Short candles.

Q. 12 to the pound. And do you remember when you started in again using the long candles, 6 to the pound?

38472 A. Just as soon as we could get them from the American Meter Company.

Q. You don't remember that date?

A. I do not.

Q. Could you refresh your recollection on that?

A. I probably have some correspondence down in my office about it.

Q. Have you with you the charts on which the corrections are made, the tables?

A. I have.

Q. Will you produce them?

A. Yes, sir. (Handing papers).

Q. Take first the charts for temperature, or the table of temperature. Did you have anything to do with preparing that table?

A. I did not. That was prepared by Dr. Love and other gas authorities many years ago.

The Master: How do you know Dr. Love prepared it?

The Witness: I understand that the tables that we use down at Grand Street, and from which copies were made, were prepared by him.

The Master: How do you know?

The Witness: Well, he gave me to understand 38474
that he did.

Q. Did he tell you that he had?

A. He told me that he had prepared all those tables.

Q. Who is Dr. Love?

A. Dr. Love was chief gas examiner for the Department Water Supply, Gas and Electricity from, I believe, 1877 to 1913.

Q. What did he do after that?

Mr. Ransom: I object to that as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. He is alive? 38475

A. He is not.

Q. How long ago did he die?

A. A few months ago.

Q. And at the time of his death, where was he employed?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

The Master: The record already shows that he was employed by the Consolidated Gas Company.

Mr. Ransom: I will admit he was employed by the Consolidated Gas Company.

Q. Was he a recognized expert in matters pertaining to gas?

A. He was.

Q. Did he prepare any of these tables during the time that you were employed there under him?

Mr. Ransom: How does the witness know?

A. He did not. They were all prepared before I came.

Q. They were his tables?

38477 Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

The Master: What difference does it make? They are the tables that you used, that is what you want to show, isn't it?

Q. Have you made any tests as to the accuracy of these tables?

A. Yes, I have gone over them a great many times. I might say they are very accurate.

Mr. Ransom: I move to strike out the words, "very accurate."

The Master: No, I will allow it.

38478 Mr. Ransom: Exception.

Q. And by applying those tables you make the correction in the observed candle power accurately?

Mr. Ransom: I object to the question. Here are logarithmic tables of a very complex sort, and if the witnesses used the tables accurately, and if the tables are accurate, they may get the results.

The Master: Objection sustained. Do you want to offer these in evidence?

Mr. Clark: I want to offer these in evidence.

The Master: Well, make your offer. What do you offer?

Mr. Clark: First I offer logarithmic table as to the rate of gas consumption.

The Master: Is that the first one?

Mr. Clark: Yes, known as Table No. 11 in this book here.

The Master: You are offering now the table which the witness testifies is the table used at the Grand Street and 79th Street station?

The Witness: This is a copy of the table used at Grand Street and 79th Street.

Mr. Ransom: How does he know it is a copy?

The Master: Well, he knows it is a copy. 38480

Mr. Ransom: A long jump.

The Master: It is entitled Table No. 11, logarithmic correction or rate of gas consumption, based upon standard rate of five cubic feet per hour. Is that the paper you are offering?

Mr. Clark: Yes.

Mr. Ransom: I object to it as immaterial, irrelevant and incompetent, the accuracy of the table not being shown, the accuracy of its use not being shown, no foundation has been laid.

The Master: Objection overruled. It will be received as Exhibit AA-438.

Mr. Ransom: Well, does your Honor receive 38481
that on the theory that the accuracy and scientific soundness of the table has been sufficiently demonstrated, or merely that it is a table which they used?

The Master: I am receiving it as the table that they used, and that the witness has testified that he has gone over many times and he says it is accurate.

Mr. Ransom: Exception.

Table marked Defendants' Exhibit AA-438.

38482 William Birdsley, Direct.

Mr. Clark: I now offer table No. 12, entitled, "Logarithmic Corrections for the Rate of Consumption of Candles."

The Witness: I might make a statement here that on this table we have not got the time of consumption in hundredths of a minute, it is in minutes and seconds on this particular table.

The Master: Well, you offer that?

Mr. Clark: Is that the table that is used?

The Witness: That is not the table that we used at Grand Street.

38483 The Master: Well, then I won't take it.

Q. Is it the table that you use at 79th Street?

A. No. I have the table here used at Grand Street.

Q. Well, is this the table you use at 79th Street?

A. No, we do not use this table at all.

The Master: Well, then, I don't want it. What is this?

The Witness: Here is the one.

The Master: Now you are offering a table entitled "Logarithmic Tables for Correction of Candles." Is that what you are offering?

Mr. Clark: Yes.

38484 Mr. Ransom: I object to it.

The Witness: Just at Grand Street. It is a copy of the Grand Street table.

Mr. Ransom: I object to it as incompetent.

The Master: Well, is there a different one at 79th Street?

The Witness: And every inspector has a copy of the Grand Street table.

The Master: Is there a different table at 79th Street?

The Witness: That is a copy of the Grand Street table.

The Master: But this is not the table you used at 79th Street?

The Witness: No.

The Master: All right.

Q. Is there a different table and different numbers used at 79th Street?

A. No.

Q. A copy of this table is used at 79th Street?

A. Yes.

The Master: Then it is the same table that is used at 79th Street, isn't it?

The Witness: The same figures. 38486

The Master: The same calculations?

The Witness: Yes.

The Master: Well, why did you say that it is a different table used at 79th Street?

The Witness: I did not mean exactly that there was a different form or anything like that, but it is just simply another table which is a copy of the table at Grand Street.

Mr. Chambers: You mean another copy used up there?

The Witness: Yes.

The Master: Mark that over the objection of Judge Ransom.

Mr. Ransom: Exception. 38487

Marked Defendants' Exhibits AA-438, 438-No. 2 and 438-No. 3.

The Witness: This is the logarithmic correction table for barometric pressure.

Mr. Clark: I offer this table of logarithmic corrections for barometric pressure.

The Master: Is this an exact copy of what is used at the two stations.

The Witness: Yes, sir.

The Master: Grand Street and 79th Street?

38488 William Bardsley, Direct.

The Witness: Yes, sir.

The Master: For 1916, 1917, 1918 and 1919?

The Witness: Yes, sir.

The Master: Sure?

The Witness: Yes, sir.

The Master: This will be received over the same objections as 439, three sheets.

Table marked Defendants' Exhibit AA-439.

The Master: You now offer the logarithmic corrections for gas temperature?

Mr. Clark: Yes.

38489 The Master: Barometric at 30?

Mr. Clark: Yes.

Mr. Ransom: Same objection, incompetent, irrelevant and immaterial.

The Master: Same ruling.

Mr. Ransom: The accuracy of the table has not been proven.

Marked Defendants' Exhibit AA-440.

The Master: Do you offer anything else, Maj Clark?

Mr. Clark: Yes, I will offer the Standard Logarithmic Tables that are used in the ordinary calculation.

38490 The Master: Well, who uses it?

The Witness: All the inspectors.

The Master: All of these inspectors who have testified use this common Logarithmic Table?

The Witness: Yes, sir, in conjunction with all logarithmic factors.

The Master: This whole book?

The Witness: Yes, sir.

The Master: This is a book.

Mr. Ransom: I see now why they did not sue.

The Master: Logarithms of numbers. I cannot read who it is published by.

Mr. Clark: Really it is a standard work.

The Master: Pocket Logarithms.

Mr. Clark: Aren't logarithms—isn't that a standard table that is used in all mathematical publications?

Mr. Ransom: I object to this. These witnesses have not been qualified in the use of logarithms.

The Master: That is why I should imagine you would want this in here.

Mr. Ransom: There is nothing to show there is any such thing. 38492

The Master: Do you object to this?

Mr. Ransom: Subject to correction.

Q. What is a logarithm—

The Master: You are offering this book?

Mr. Clark: Yes.

The Master: It will be received.

Book marked Defendants' Exhibit AA-441.

Q. What is a logarithm, Mr. Birdsley?

Mr. Ransom: Objected to, incompetent.

The Master: I will let the—no, I won't.

Mr. Clark: It may appear on the record it is just a simple way of calculating.

Mr. Ransom: Simple? 38493

Mr. Clark: Yes, that is all it is, with a sliding rule, or anything.

Q. What is a logarithm?

The Master: Objection sustained.

Mr. Clark: Exception.

Q. Doesn't it simplify the calculations, by the use of the logarithm table?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

Mr. Chambers: Exception.

38494 Q. Is the logarithm table a well known method of making calculations?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Q. Is it a standard work we have offered?

Mr. Ransom: Objected to as incompetent.

The Master: It is allowed.

Q. Is that a standard work?

A. It is accepted by most mathematicians who—

The Master: As a standard pocket logarithm?

The Witness: Logarithm table.

38495 Mr. Ransom: I move to strike out his statement "accepted by most mathematicians."

The Master: I will allow it.

Mr. Ransom: Exception. This witness does not know much about "most mathematicians."

Q. Do you test the gas to ascertain its content for the purpose of finding out where it was made, and whether it is coal or water gas?

Mr. Ransom: Objected to as incompetent.

The Master: Objection overruled.

A. Yes, we have made tests in order to ascertain the component parts of gas, and in the analysis we have been able to deduce as to the composition of the gas, and the way it was manufactured.

38496 Q. Is there a difference between the composition of coal and water gas?

A. There is.

Q. What is the difference?

A. Its chemical composition is different.

The Master: Well, how am I interested in this?

Mr. Clark: Well, you brought up the question as to how they could tell what different gases came to this station, and I want to show you how they do tell it.

The Master: I won't take it.

Mr. Clark: It is quite important.

The Master: I won't take it.

Mr. O'Brien: Your Honor, this is a preliminary question to bringing out something that is just what you want.

The Master: I don't want it.

Mr. O'Brien: Well, I am assuming that what you say you wanted yesterday, you might want today.

The Master: Anything more of Mr. Birdsley?

38408

Q. Mr. Birdsley, from the tests that you have made, can you state what gas generally comes into the 79th Street station?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. Can you state what gas generally comes into the Grand Street station?

Mr. Ransom: Same objection.

The Master: Same ruling.

Q. Can you state whether you test all of the gas made by the Consolidated Gas Company?

Mr. Ransom: Objected to as incompetent.

38409

The Master: Same ruling.

Q. Did your department make a complete survey of the city to ascertain what gas was furnished different sections?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. Can you state whether the gas furnished outside of the testing stations is of as high candlepower as that furnished to the testing stations?

38500 William Bardsley, Direct.

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. Clark: Exception.

Q. What examination, if any did you make to ascertain the candlepower furnished away from the stations of your department?

Mr. Ransom: Objected to as incompetent, irrelevant and immaterial.

The Master: Same ruling.

Mr. Clark: Exception.

Q. Did you take tests at the different fire-engine houses in the city?

38501 Mr. Ransom: Objected to as incompetent and immaterial.

The Master: Same ruling.

Mr. Clark: Exception.

Q. Can you state whether in your opinion it is possible for the company to send a certain gas to the testing stations?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. Clark: Exception.

Mr. O'Brien: Your Honor, is that ruling on the theory that the witness is not qualified in any particular to enable him to make this answer?

38502 The Master: I decline to discuss it.

Mr. Chambers: I ask the Master to state what the ground of his ruling is.

The Master: I won't say.

Mr. Chambers: Exception; and I ask you to advise us on what grounds you disallow the question.

The Master: I won't.

Mr. Chambers: Exception.

The Master: I won't advise, because it leads to a discussion, which takes up too much time. Next question.

Mr. O'Brien: Your Honor, this is a very important matter. Your attention is called by these questions to purposes that will bring the question within the rule as to competency, materiality and relevancy. You raised that question yesterday, you had your doubts as to these testing stations and what gas they used and whose gas it was tested, and because of those doubts you allowed in evidence these tests of the various companies so we would have all the gas that came into the testing stations tested, the results of the tests are in evidence, and I think it is highly 38504
important for you to know the facts that may be brought out by asking the witness these questions. It all bears on the question of the tests, the attitude of the company, the bona fides of the company with respect to this statute, and it is certainly competent, and if your Honor sees fit to rule out the questions it would be a proper thing, I think, for the Master to state the basis of that ruling.

The Master: Next question.

Mr. O'Brien: I do not think any discussion—

Mr. Chambers: Just one thing more. I ask you to take his answers, so that the reviewing 38505
Court may know what the testimony was that you ruled out.

The Master: No.

Q. Can you state whether the chemical content of the gas taken from the different taps at the risers at 79th Street is the same?

Mr. Ransom: Objected to as incompetent, immaterial.

The Master: Same ruling.

Mr. Clark: Exception.

38506 William Birdsley, Direct.

Q. Can you state whether the chemical content of the gas taken from the different risers at the Grand Street station is the same?

Mr. Ransom: I object to it on the same grounds.

The Master: Same ruling.

Mr. Clark: Exception. I offer to prove by Mr. Birdsley and his assistants, that a survey of the city was made, that the result of that survey was the conclusion that the gas company did furnish higher candle power of gas to the sta-
38507 tions than they furnished at other parts of the city, that they do to a certain extent control their gas, and that the labels that they have put on the different pipes in those houses do not correctly represent the place from which the gas comes, and I further offer to show what the chemical analysis of the gas shows as to where the gas came from, whether it was coal or water gas, and the entire results of that survey of the city.

Mr. Ransom: Without admitting the correctness of Mr. Clark's statement, I object to such line of inquiry as incompetent, irrelevant and im-
38508 material.

The Master: Any other questions of this witness?

Mr. Clark: I understand any testimony on that line will be ruled out.

The Master: Ask your questions.

Mr. Chambers: What is the ruling?

The Master: I say, ask your questions. I will pass on questions as they are asked.

Q. Do you know when this system of inspection was started in the city?

The Master: What system of inspection?

Mr. Clark: Inspection of the gas.

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Clark: Exception.

Q. Who inaugurated the system?

Mr. Ransom: Objected to as incompetent, immaterial.

The Master: Same ruling.

Mr. Clark: Exception.

Q. Do the candles of twelve to the pound which you used for a few months in 1917 give the same illumination that candles of six to the pound would give? 38510

Mr. Ransom: I object to it.

The Master: Same ruling.

Mr. Clark: Exception.

The Master: That is for the Legislature to say, whether they could use six or twelve, or either one, and the Legislature said six and not twelve.

Mr. Clark: The statute can be reasonably construed all right.

The Master: Next question.

Mr. Clark: I have no further questions.

The Master: You have something else? 38511

Mr. Chambers: Yes.

By Mr. Chambers:

Q. If the temperature in the room is 60 degrees or over, does the temperature in the room regulate the temperature of the gas to be tested?

A. Yes, certainly.

Q. And if the temperature in the room is higher than the temperature outside, the test will be made according to the temperature in the room, won't it?

Mr. Ransom: I object to that as incompetent.

The Master: I will allow it.

The Witness: The temperature—we would consider the temperature of the gas, not the temperature of the room.

Q. And that would be governed, you say, by the temperature of the room?

A. Of course, the temperature of the room slowly rising will have an effect on the water in the meter and cause the temperature of the water to rise. That will also effect gas passing through the meter, and gives a corresponding rise in ratio of the temperature
38513 of the gas passing through the meter.

Q. And if the temperature in the room was 60 degrees, it would not make any difference whether on the 31st of December, 1917, the temperature outside was 13 below, would it?

A. Absolutely not.

Q. So that the temperature outside, out in the streets of the city generally hasn't anything to do with the testing, providing the temperature in the room is above 60?

A. And the temperature of the meter.

Q. And the meter?

A. Yes.

38514 Q. Now, all of this underlying data of the observed candle power was preserved, wasn't it?

A. It was.

Q. And you have it?

A. I have.

Q. So that it can be produced?

A. I think so.

Q. Now, how voluminous is it, say, for 1916, 1917, 1918 and 1919, can you give some idea of the bulk of that underlying data?

The Master: Well, there are as many sheets of that kind as there are sheets in evidence, aren't there?

The Witness: No, your Honor, there would be five sheets for every one sheet here.

The Master: All right, then, we know how many there are.

Q. And about how many, how much of a bulk would there be in your underlying data for those years?

Mr. Ransom: Objected to.

The Master: I won't take it. There are five times the number of exhibits we have got here, of sworn reports. I can see it myself.

Q. Would the fact that you used for a short time 38516
twelve candles to the pound, and the candles that were used, make any difference in the test for candle power?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained.

Mr. Chambers: Exception.

The Master: I don't know whether it will or won't, and I do not care. The statute says you must use candles six to the pound, not twelve.

By Mr. O'Brien:

Q. Have you ever received from the complainant company since 1912, any complaint stating that the tests, results of tests sent to the company by the city were erroneous or inaccurate or unfair? 38517

Mr. Ransom: Objected to as immaterial and incompetent, this witness is not the Commissioner of Gas and Electricity.

The Master: Objection sustained, it doesn't make any difference.

Mr. Ransom: Immaterial, anyway.

Mr. O'Brien: Exception.

Q. Was Dr. Love a Doctor of Laws, or Doctor of Pharmacy or Doctor of Chemistry?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. O'Brien: Exception.

38518

Q. Were you acquainted with him, and worked under him?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Q. When did he leave the city employ to go into the employ of the Consolidated Gas Company?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Exception to all your rulings.

Q. Is Dr. Love living or dead now?

The Master: Same ruling. We have him

38519 dead half a dozen times in this record.

Mr. O'Brien: I want him dead right in this bunch of questions here, your Honor.

The Master: Well, yet you will be complaining that you are dead for I work you too hard, and you are wasting time minute after minute.

Mr. O'Brien: I am asking the questions, and to every question you can make your ruling.

The Master: Well, if your reasons are as good as your reason for asking again whether Dr. Love is dead, they are probably not much use in this record. Go ahead.

Q. How often do you visit the testing stations un-

38520 der you?

Mr. Ransom: Objected to as incompetent.

The Master: Same ruling. Objection sustained, the subject has been exhaustively covered.

Mr. O'Brien: Exception.

Q. Now, do you supervise the testing of the apparatus in each testing station?

Mr. Ransom: Objected to as incompetent.

The Master: Same ruling.

Q. On the occasion of those visits?

The Master: Same ruling.

Q. And do you take such action as the conditions that you observe may call for?

Mr. Ransom: Objected to.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Have you yourself personally, or have you in your official capacity, sent any notices of tests, results of tests, to the complainant company?

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: Same ruling.

Mr. O'Brien: Exception. 38522

Q. Has any complaint, to your knowledge, ever been sent to the department as to the system of making tests?

Mr. Ransom: Objected to as incompetent, irrelevant and immaterial.

The Master: Same ruling.

Q. (Continuing.) That is carried on by the Department of Water, Gas and Electricity?

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Do you keep yourself informed as to the gas making industry, by the perusal of works on gas making and gas engineering journals, and the reports 38523
of gas makers' conventions, the American Gas Association, and some of those?

Mr. Ransom: Objected to as immaterial.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. And will you state whether or not, from your knowledge of the gas making industry developed through a study of works on gas making, inspection of gas plants, the perusal and study of engineering journals, whether or not the system which is used and has been used by the City of New York in its

Department of Water, Gas and Electricity, is not a generally recognized system of testing gas for candle power?

Mr. Ransom: Objected to as immaterial and incompetent.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Do you know how tests are made by the Consolidated Gas Company for candle power?

Mr. Ransom: Same objection.

The Master: Same ruling.

38525 Mr. O'Brien: Exception.

Q. Do you know what candles the Consolidated Gas Company uses in making such tests?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Has any criticism, or have you met the officers or engineers of the Consolidated Gas Company during the period that I have previously mentioned at any time and discussed with them the method of testing gas which is carried on by the city?

Mr. Ransom: Objected to.

The Master: Same ruling.

38526 Mr. O'Brien: Exception.

Q. Have the said officers or engineers of the Consolidated Gas Company at any time ever stated that the method or the details of the method used by the City of New York in its various testing stations under your supervision is inaccurate?

Mr. Ransom: Objected to as incompetent and immaterial.

The Master: Same ruling.

Q. Or unfair?

The Master: Same ruling.

Q. Or not calculated to give such tests as are required by the statute?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. What has been the discussion upon that subject between you and representatives of the Consolidated Gas Company?

Mr. Ransom: Same objection.

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. Has any request—first, are the records, the testing sheets, the sworn statements of tests, the other detailed records kept in the course of conducting these 38528
testing stations under your particular supervision and in your custody?

The Master: Same ruling.

Mr. O'Brien: Exception.

Q. At any time since the statute went into force and effect, requiring the 22 candle power, and since your connection with the Department of Water, Gas and Electricity, has there ever been a request on the part of the Consolidated Gas Company or any of its affiliated companies for leave to inspect the testing sheets or underlying data that you have in connection with the daily sworn records of tests made?

Mr. Ransom: Same objection. 38529

The Master: Same ruling.

Mr. O'Brien: Your Honor, of course it is obvious the purpose of that question is perfectly proper. Here are public records, available to the gas company which might be consulted at any time under the law, and which might be perused and checked up and calculated, and your Honor surely will see I think, on consideration, that it is a proper question to ask.

Mr. Chambers: They are public records, and

38530 William Birdsley, Direct

they are charged with notice or knowledge of them anyway.

Mr. O'Brien: Exception.

Q. Has any request ever been made in behalf of the Consolidated Gas Company for leave to inspect the apparatus that you use?

Mr. Ransom: Same objection.

The Master: Same ruling.

Q. And thermometers and barometers and the water levels, the candles, the logarithmic tables, the books of logarithmic tables, or the tables that you used for

38531 correction purposes?

The Master: The same ruling applies to this question, and if any other question on that line is asked, I shall order the witness off the stand.

Mr. O'Brien: I note an exception to your Honor's ruling on that.

Q. Will you state why, in the testing station of the city, at one time two candles were used instead of one?

The Master: That objection is sustained. You are simply going over ground already covered, and unless you have some new line of inquiry I shall order the witness off the stand.

38532 Mr. O'Brien: I shall have to reframe that question, if your Honor will allow me, and state to the witness—ask the witness why they have used two candles instead of one.

The Master: That has already been covered, I have told you. Mr. Clark asked that.

Mr. O'Brien: Exception.

Q. And in your opinion—

The Master: You mean why did they cut candles in half?

Mr. Clark: No, why did they burn two candles at a time.

The Master: Well, that was the same thing.

Mr. Chambers: No.

Mr. Clark: He said each candle burns 120. Why did they burn two? Judge Ransom brought it out.

The Master: Yes, I will let him say why he burned two. Why did you burn two candles, when the statute said one candle?

The Witness: During 1917 was the only time that we burned—that we used 12 to the pound.

By the Master:

Q. Well, did you only use two candles when you 38534
used 12 to the pound?

A. Yes, we always used two candles.

Q. What do you mean?

A. I might go to a little length on this, and explain it.

Q. No, it is getting too late for a little length. What I want to know is this, the witness has testified that they used two candles, at all tests, is that correct?

A. They always used two candles.

Q. Well, now, the question is, why did you use two candles? The statute, as I understand it, says one candle, doesn't it? 38535

A. The statute says that the candle power of the gas shall be equal to 22 sperm candles burning at the rate of 120 grains per hour. Experience has shown that you cannot use one candle making that test, the light emitted by one candle will of course, be very irregular, or possibly irregular, due to the fact that the sperm may be consumed faster or slower. The irregularity of consumption, combined with the low intensity of one candle would necessitate a longer bar than we use at the present time. We use a 60 inch bar, and if we used one candle we would have to use

a longer bar, therefore the experts a great number of years ago, probably as far back as the 80's—

Mr. Ransom: I move to strike out what the experts in the 80's did. Let him describe—

Mr. O'Brien (interrupting): He is giving a generally recognized—

The Master: No. You asked him his reason for using two candles and I think he has given us that, and I will stop there.

Mr. O'Brien: Won't you let him complete it, your Honor?

38537 The Master: No. His reason for using two candles is that he could not get a regular flame or a proper intensity with one candle, is that the reason?

The Witness: Well, you would probably get the proper intensity all right from one candle, that is, you would get one candle power, but the working of the apparatus would be a little difficult, due to the fact that it would require a very long bar, instead of a 60 inch, a 100 inch bar, and the disc would not be seen as readily as it you used two candles on a shorter bar.

The Master: That is the reason. Go ahead

38538 with the next question.

By Mr. O'Brien:

Q. And the use of the two candles produces a more accurate test?

A. That is all. Only that. When one may be burning a little bit off, the other will be normal, and the result is that you will not get so many variations in your readings on the bar.

The Master: The result is that you are testing—you are using a basis of candle consumption at 40 grains instead of 20.

The Witness: That is all.

The Master: At 240 instead of 120 per hour.

The Witness: Using two candles.

The Master: Isn't that true?

The Witness: That is so.

The Master: That is why I showed you this before.

The Witness: The candle would be burning at the rate of 120 grains per hour.

Mr. Ransom: But that—do they take into account—

Mr. O'Brien (interrupting): What do you mean, what did you pass to him before, your 38540
Honor?

The Master: The form that was produced here.

By Mr. Clark:

Q. Mr. Birdsley, is the machine adjusted so that you get the result of 22 candles?

Mr. Ransom: Objected to.

The Master: Objection sustained. The point is that the statute says you are to do this on the basis of 120 sperm candles, 6 candles to the pound, and they tested on the basis of 240.

Mr. O'Brien: That is not what the statute provides, your Honor. 38541

Mr. Clark: That is the same thing.

The Master: I don't know whether it is or not.

Mr. Clark: It is more accurate, that is all.

Mr. Ransom: He puts them so that one candle plays against the other, and if both of them are off there is more trouble.

The Master: Finish up with this witness.

Q. This bar is graduated, is it not?

A. It is.

Q. So that you have the result of one candle?

Mr. Ransom: Objected to as incompetent.

The Master: I will allow it.

Mr. Ransom: Exception.

A. It is.

Q. Will you explain how it is done.

The Master: No, we have had that before.

Mr. O'Brien: Your Honor has asked the questions before, and I crave the permission to ask this witness a question on that myself.

The Master: It is already covered.

Mr. O'Brien: And I want a complete explan-

38543 ation.

The Master: I won't allow any more.

Mr. Chambers: Exception.

The Master: The record is complete on that subject. The witness's testimony is perfectly clear. He says that they get the same result, calculating it down, when they use two candles, so that the result in his judgment is better than if they used one. Is that correct?

The Witness: That is so.

By Mr. O'Brien:

Q. Then it is reduced to a basis of one candle, in the result?

38544 The Master: That is covered fourteen times.

Mr. Ransom: Objected to as incompetent.

The Witness: Yes.

The Master: He has answered it.

Q. Now, is it not a fact, from your own personal knowledge, that the complainant company uses two candles on its tests?

Mr. Ransom: Objected to as incompetent.

The Master: Objection sustained. Now, you have been over that once before, and I told you I would take the witness off the stand if you did it again.

Mr. O'Brien: Exception. Well, I have got to—these rulings of the Master are certainly confusing to me.

The Master: They ought not to be.

Mr. O'Brien: I have got to puzzle my brain to find out why, if this witness knows the method that is used by the Gas Company, recognized by it—

The Master: We are talking about the statute, not about what this Gas Company does.

Mr. O'Brien: You are talking about the accuracy of a method, the reliability of a method for 38546
complying with the statute.

The Master: Not at all.

Mr. Chambers: The statute only prescribes the well recognized method.

The Master: You know the theory of my ruling now, don't ask any more questions on that line, because I will take Mr. Birdsley off the stand if you do.

Mr. Chambers: Let us ask him if the statute is not a well known and well recognized—

The Master: I won't let him construe this or any other statute.

Q. Is there a similar statute in other states, if you 38547
know?

Mr. Ransom: I object as immaterial and incompetent.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Mr. Ransom: Contrary to the testimony.

Q. Are the instructions to the inspectors of the various stations written instructions?

A. No, there is no—

The Master: That is an answer, no.

Q What instructions are given to the inspectors of the several stations as to the manner in which these tests are to be conducted?

Mr. Ransom: Objected to.

The Master: Objection sustained.

Mr. O'Brien: Well, there is a presumption, your Honor, that the officials of the City do their duty.

The Master: But these witnesses have testified what they do, we do not need their presumptions.

38549 Mr. O'Brien: Now, your Honor has brought out the question of instructions yourself, you tried this morning with that witness, the witness Straus there, to bring out that same thing. You laid great emphasis on his instructions, and isn't it fair for me to ask this witness now in re-direct what the instructions are that are given to these men?

The Master: Certainly not.

Mr. O'Brien: Then there is a presumption that they conform with those instructions.

The Master: Have you any other questions?

Mr. O'Brien: Exception.

38550 The Master: I want to know whether Mr. O'Brien has any more questions, when he says he has not I am not going to let him come back again and ask any other questions.

Mr. O'Brien: Well, the witness is going to be on the stand again, your Honor.

The Master: For what?

Mr. O'Brien: He is going to be on the stand in connection with other data on these tests.

The Master: All right, but you will never get another question on this matter that you are talking about now.

Mr. O'Brien: Never?

The Master: When this witness leaves the stand, no.

Mr. O'Brien: You mean we cannot recall him as the complainant recalled witnesses from time to time?

The Master: Not on this same line of examination, and not on this subject-matter, no. Now, go on, Mr. Clark. Have you anything else?

Mr. O'Brien: I will take an exception at the right time on that.

Mr. Chambers: I will take an exception, we will take one now and take one later. 38552

By Mr. Clark:

Q. I show you two reports of tests, July 7, 1919, and ask you whether they are correct?

A. They are.

Q. You did not swear to them at that time, did you?

A. I did not.

Q. But you now swear that they are correct?

A. I do.

Q. Were those tests made by you personally?

A. They were.

Q. Now, you swear to them? 38553

A. Yes.

Q. And those tests were made in the manner which has been described here?

A. They were.

Q. And those are accurate representations of the tests so made and corrected?

A. Yes.

Q. And the tests were correct, to the best of your knowledge and ability?

A. Yes.

Mr. Clark: I offer those two in evidence.

The Master: They are not received.

Mr. Chambers: Why?

Mr. Clark: I take an exception.

The Master: Next question.

Mr. Chambers: Well, will you state why you won't take them?

The Master: No.

Mr. Chambers: You won't give us any reason at all?

The Master: No. If you do not know the reason, I won't give it to you.

Mr. Chambers: Because they are not sworn

38555 to?

The Master: If you don't know the reason, I am not going to give you any.

Mr. Chambers: Well, I am going to ask him to swear to them right before the Master. Will you swear him?

The Master: I will not.

Mr. Chambers: Exception.

Mr. O'Brien: Here is a notary, Mr. Hirsoff

Mr. Chambers: Will you swear him, Mr. Hirsoff?

Mr. Hirsoff: Do you swear this is your signature?

38556 The Witness: I do.

Mr. Ransom: I object to this anomalous proceeding.

The Master: The record will show what is going on here.

Mr. Hirsoff: Do you swear this to be correct?

The Witness: I do.

The Master: Now, you offer that as having been sworn before a notary, do you?

Mr. Chambers: Yes.

The Master: They are again rejected on the ground they were not sworn to when filed in the department, and they were not sworn—

Mr. Chambers: There is nothing says they have to be—

The Master: I have received all these papers as public documents filed with the department in accordance with law, and these were not sworn to.

Mr. Chambers: I want the record to note all that.

The Master: You now have the permission to ask Mr. Birdsley what tests he made on particular days, irrespective of those reports, and what he found was the observed candle power, and what 38558
corrections he made, and give all the data in detail with reference to it, if you so desire.

Mr. Chambers: You decline to receive these now after they are sworn to? There is nothing in the statute that I know of that says they have to be sworn to on any particular day.

The Master: I don't say that either, but they have to be sworn to before they are filed as departmental records, and you cannot produce them here as departmental records and then have them sworn to here.

Mr. Chambers: I do not see why not.

Mr. Clark: We can file them there and then 38559
bring them back tomorrow.

The Master: A Supreme Court Judge once said in my hearing, "Don't commit forgery in the court room." You should have done it before you brought them here.

By Mr. Clark:

Q. Now, Mr. Birdsley, will you state what tests you made on the 7th day of July, 1919, at the Grand Street station?

The Master: Did I understand the question to mean the candle power he found?

Mr. Clark: Yes.

38560 William Birdsley, Direct.

The Master: I will take his answer, observed candle power first.

Q. Have you that data here in the observed candle power?

A. I have not.

Q. Then can you give the corrected candle power?

The Master: I won't take it until he gives me the observed candle power and shows me how he arrived at the correct candle power.

Mr. Clark: Exception. I ask that these two sheets be marked for identification.

38561 The Master: You can identify them by referring to them on the record. What is the date of them?

Mr. Clark: July 7, 1919, and July 8, 1919, sworn to before Mr. Hirsoff, Commissioner of Deeds, today, here in court.

The Master: They are sufficiently identified. Anything else of this witness?

Mr. Clark: I have nothing at this time, no, sir.

The Master: Has Mr. Chambers anything more?

Mr. Chambers: Of this witness?

38562 The Master: Yes.

Mr. Chambers: Yes, observed illuminating power of this gas.

The Master: You can recall Mr. Birdsley to swear to the details of his tests on those two days, if you want to, at 2:15.

Mr. Clark: We are going to bring in the test sheets, your Honor.

Mr. Chambers: That is a very short lunch hour.

The Master: That is your fault, not mine.

Recess.

38563

Afternoon session.

The Master: Proceed, Major Clark.

Mr. Clark: I will call Mr. Frank.

The Master: No, finish with these gas inspectors. I want to clean that up first.

Mr. Clark: We have not been able to get those things up here. I have sent for them.

The Master: Are you ready to cross-examine Mr. Frank?

Mr. Ransom: Is Mr. Frank ready for cross-examination?

Mr. Clark: Yes. I have that table I gave you, that I want to put in evidence. I gave you copies of it. 38564

Mr. Ransom: Is there anything else on this candle power matter except bringing up those records?

Mr. Clark: I do not know of anything.

Mr. Ransom: That is, there are no more gas inspectors?

Mr. Clark: None that we can get.

Mr. Ransom: Are Professor Bemis and Dr. Maltbie going to put in any more tables? We ought to have those today.

Mr. Clark: I suggest that you wait until their counsel are here for that. 38565

Mr. Ransom: Have you any more tables?

Mr. Clark: What?

Mr. Ransom: Have you any more tables?

Mr. Clark: I will have some more, yes.

The Master: When?

Mr. Clark: I expect one of them this afternoon.

The Master: I understood you had one more that I extended your time on, Major?

38566 Charles Frank, Direct.

Mr. Clark: That was Dr. Weber's table, and the tax table I spoke about, that was ready yesterday, and he was here, but today I understand Dr. Weber is sick. He has been sick for the past week.

The Master: What kind of a table is it; what is it supposed to do?

Mr. Clark: It shows the taxes that we claim should be applied to gas and non-gas for all the years.

The Master: Go on with Mr. Frank.

38567 Mr. Ransom: He is dragging his time on and piling up cords and reams of tables.

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CHARLES FRANK, resumed the stand:

DIRECT-EXAMINATION BY MR. CLARK:

Q. Mr. Frank, I show you this table and ask you what it is (handing witness paper)?

A. It is a summary of the average price charged and the average price paid by the Consolidated Gas Company for gas transferred. It is simply a gathering together of average prices which are shown on—

38568 Q. Defendants' Exhibit AA-104, analysis of gas transferred (handing witness paper)?

A. Yes.

Q. Was that prepared under your direction?

A. Yes.

Q. And have you checked it?

A. I have.

Q. And is it accurate?

A. It is.

Mr. Clark: I offer it in evidence.

Mr. Vilas: Wasn't that marked Defendants' Exhibit AA-405 for identification?

The Witness: Gas transferred is marked here AA-404.

Mr. Vilas: Yes, and this table is known as your Schedule No. 29.

The Master: Yes.

Mr. Clark: Yes.

Mr. Vilas: Schedule No. 29?

The Witness: Yes.

Mr. Vilas: This one you gave us copies of.

Mr. Ransom: I object to it as incompetent, irrelevant and immaterial.

The Master: It cannot do any harm. I will 38570
take it.

Mr. Ransom: But it just piles up the record.

The Master: I will take it.

Mr. Ransom: Averages on gas transferred? People unfortunately cannot pay for averages; they can pay the price of the gas.

The Master: Overruled.

Mr. Ransom: Exception.

Received in evidence and marked Defendants' Exhibit AA-442.

The Master: Then you are through, Major Clark? 38571

Mr. Clark: I am through.

The Master: Cross-examine, Judge Ransom.

Mr. Ransom: Is that all that is to be put in by Mr. Frank?

Mr. Clark: That is all that is to be put in by Mr. Frank.

CROSS-EXAMINATION BY MR. VILAS:

Q. Take Exhibit AA-400, your Table No. 38. Have you got your papers with you?

A. Mr. Clark has them (witness takes papers). This is Central Union.

38572 Charles Frank. Cross..

Q. Central Union?

A. Yes, sir.

Q. You included in this table all the items found in the annual reports under production cost?

A. I did.

Q. Including repairs, miscellaneous works expense?

A. Yes.

Q. Storage?

A. Yes.

Q. And station distribution?

A. I don't think there is any such account on the
38573 annual reports called station distribution.

Q. There is such an account in the uniform system of accounts, is there not?

A. No. There is such an account on the company's ledgers, but not called for in the uniform system of accounts.

The Master: Did you take it on that statement?

The Witness: I took this from the annual reports, not from the books.

Q. You did not check up on the books at all in making up this statement?

A. I did not. These are made from the annual re-
38574 ports alone.

Q. You have on a number of occasions combined in one item items which appear severally in the annual reports?

A. Yes, as I testified before.

Q. You show under the heading "Gas-Coal," both coal used in the retorts and under the retorts?

A. Yes, sir.

Q. So that you do not find the very same dollars that appear here as in the annual report?

A. No, some of the figures here are combinations.

Q. And you have also combined under the head-

ing "Residuals Produced" both residuals sold and residuals used in production and residual expense as a credit?

A. Exactly.

Q. Where did you get the figures for your residuals?

A. From the annual reports.

Q. Are they reported in full detail in the annual reports?

A. They are reported in considerable detail, but as to the separation between the residuals produced from water gas and coal gas some of the residuals 38576 are the result of both, and I divided them on some basis which I considered reasonable. But those particular residuals are very small and the effect would be negligible upon the average results obtained.

Q. What basis did you consider reasonable for that division?

A. Take the item of drip oil, which as I understand is derived from both coal and water gas, in 1914 the total amount of drip oil sold was only $2,333, and the expense connected with it was $45. Well, I split that up equally between the coal gas and water gas, and I split up the expense equally between the coal and the water gas, on the ground that the 38577 production of the coal and water gas were in 1914—there was not much difference, and the net amount is so small as practically not to effect the unit cost of manufacture.

Q. There was, as a matter of fact, more water gas than coal gas?

A. Yes, there was more.

Q. You did not divide drip oil between coal and water gas in your Astoria tables, did you?

A. I did not.

Q. Why did you treat that differently?

A. According to the annual reports of the Commission only part of the coal gas manufactured at Astoria was enriched at Astoria; the other is enriched at the Ravenswood works of the New Amsterdam Company, and the total amount is very small. It appears in only one or two years at all. Under the large production of Astoria it would not amount to —it would not affect the average cost beyond one-hundredth of a cent.

Q. On those two items, then, you exercised your judgment?

38579 A. After speaking to a gas engineer.

Q. You got a formula for doing that from a gas engineer?

A. Not a formula. I asked him if my division was a reasonable one under the circumstances and he said he thought it was.

Q. Did you check this table yourself or did you only check some of the items?

A. I checked the positive figures, the dollars, myself. That is, I checked all of the dollar figures myself and checked some of the derived averages to test the accuracy of the work done. It is all machine work.

38580 Q. That was done by your assistants?

A. Yes.

Q. I notice on this statement that you carry an item after your coal gas figures "M Cubic Feet Manufactured," showing for each year amounts of cubic feet, and at the end of the water gas statement you carry an item designated "M Cubic Feet Sold." Why do you use cubic feet manufactured in the case and cubic feet sold in another?

A. That is a typographical error. It is manufactured.

Q. Both should read "Manufactured," should they?

A. Both should read "Manufactured." They had been corrected on the—

Mr. Clark: Do not correct it on the exhibit.

Mr. Vilas: Have you got the Astoria Reports here, Major Clark?

Mr. Clark: Yes, I think they are down in the office. I will get them.

Mr. Vilas: All right, you just get them and I will go right ahead. Do you want me to wait?

Mr. Clark: Yes. 38582

Mr. Vilas: Have you the Central Union Reports there, too?

Mr. Clark: I think they are both there.

Mr. Vilas: I meant to include them when I said Astoria. I can use them, too.

Mr. Clark: I am not sure whether they are both there or not (handing Mr. Vilas papers). It looks like both of them.

Q. Mr. Frank, will you show us in the Central Union report for 1912, where you got your figures for residuals (handing witness reports)?

A. For residuals?

Q. Yes. 38583

A. On page 53 there is a little table in the lower right-hand corner of residuals sold. There is a table of residuals sold there.

Q. Yes?

A. And there—

The Master: Well, that is an answer. That is where you say you got your figures from?

The Witness: In addition to that I used other figures in the report.

The Master: What other figures?

38584 Charles Frank, Cross.

The Witness: May I look at the report (takes report)? On page 57, duplicate charges, on line 19, $151,388.40.

Q. 57 you said, did you?

A. Yes.

The Master: Yes, line 19.

The Witness: On page 57; and in conjunction with that the amount credited to duplicate gas charges for gas used, on page 56, line 44, column E; and again on page 57, line 16, the amount of residual expense.

38585 Q. From those figures which you have called attention to you have derived what you have assumed to be the total of residuals produced; is that right?

A. Yes.

Q. Does that take into account the stock account and the variation in the amount on hand at the beginning and end of the period?

Q. If you take it in, I took it in. I have taken the financial figures, the dollars and cents, as reported by you, and split them up between coal and water gas.

Q. You understand that the amount shown for residuals sold includes only the amount of residuals

38586 actually sold, do you not?

A. So I understand.

Q. And the duplicate gas charges show you the dollars for the residuals actually used?

A. Yes.

Q. So that that would not include the "On Hand" at the beginning or end of the period?

A. Not unless you sold and used exactly what you produced.

Q. And if we did not sell and use exactly what was produced, then these figures here are not absolutely accurate?

A. No.

Q. I note that you carry on this sheet at the bottom a note "E" to the effect that on the basis of operating 350 days in the year the total capacity or output of these plants would be so many cubic feet of water gas and coal gas. You do not find that information anywhere in the annual report, do you?

A. No, it is simply a calculation made on some figures in that annual report. That is, I take the daily capacity and multiply it by 350. I used nothing else.

Q. Who told you to use 350? 38588

A. If I remember, Dr. Weber or Dr. Bauer.

Q. They gave you that amount, did they?

A. Yes.

Q. You simply made the calculation?

A. I simply made the calculation. I do not know anything about facts.

Q. You made no investigation about the daily demand on the Central Union?

A. Nothing at all.

Q. At different periods of the year?

A. No.

Q. You did not know its maximum sendout?

A. No. 38589

Q. Or the minimum demand in the several months?

A. No, it is simply a mathematical computation, that is all that is.

Q. And you made it under instructions, or put that note there under instructions from Dr. Weber?

A. Yes.

Q. Where did you get the total water gas for 1918 which you state at 2,696,229,000 cubic feet?

A. That same note you mean?

Q. No, I am speaking of the Central Union water gas production.

A. On page 55, I believe, of the report of the Central Union.

Q. The figures for 1918—I will show you this in just a second—show a total manufactured of 2,709,854,000 cubic feet, and under that an adjustment deduction for loss in gas volume of 10,625,000 cubic feet. Do you find that in your working papers (handing witness report)?

A. No.

Q. Why did you take the net make instead of the gross make?

38591 A. The company states here the number of cubic feet of gas manufactured, net.

The Master: The question is, why did you take the net instead of the gross?

The Witness: The rest was not gas that was used by consumers.

Q. But it was manufactured, was it not?

A. It was.

Q. And this loss in volume is due to the light oil extraction, is it not?

A. So I assume, yes.

Q. And materials and labor for which you have shown amounts on your tables went into the manu-

38592 facture of the gross make, did it not?

A. My understanding was that this loss in gas volume, the steam and so on, was charged to the United States Government and it was credited to these manufacturing expenses.

Q. You have not answered my question, yet, which was that the cost of labor and materials which went to make up the gross make is shown in your tables, is it not?

A. No, I should say that the expenses reflect the net manufacture.

Q. Where do you find, then, in the expenses, the

credit for the amount that was charged to the United States Government; do you show that in this table?

A. Well, the amount there, the credit for steam at $18,045.47, and water gas, I assume to be a part of that.

Q. Where do you assume the rest of the credit appears in that statement?

A. There is a credit there for gas production, undistributed adjustments, $4,476. I believe that would affect it.

Q. Is that item that you have just referred to shown in the annual report to the P. S. C.? 38594

A. I read it from that report.

Q. And do you assume this item of $4,000 odd in adjustment accounts for the 10,000,000 odd cubic feet that are shown there as loss in volume?

A. It might account for part of it.

Q. How would you account for the rest of it?

A. My understanding of the contract with the Government was that all the cost of making gas was to be charged to the Government, and I assumed they were credited in your operating expenses. There is not enough information in the annual report to make absolutely certain of that.

Q. Then you cannot be absolutely certain that you were correct in using the net make in arriving at your cents per thousand? 38595

A. There is nothing there in the report to show that the credits for materials used in making that light oil were charged anywhere else than in production.

Q. Answer the question, please.

Mr. Clark: He has answered the question.

Mr. Vilas: Read the question again.

(The stenographer repeated the question.)

A. Not absolutely, but reasonably so.

38596 Charles Frank, Cross.

Q. Will you just read what the company reports that 10,000,000 cubic feet as, in that rider that is on the foot of that page?

A. Did you say ten million?

Q. I am speaking from memory; I may be wrong.

A. As the number of cubic feet made?

Q. Loss in volume.

A. It reads there 10,625, with a small "o," A-A, I think, or two little crosses or something there, but I do not see anything on this page referring to those little stars. Less Loss in Gas Volume, under Water
38597 Gas of Stations, 10,625, and also under Total Manufacturing Expenses 10,625.

Q. That is 10,625,000 cubic feet, is it not?

A. Yes.

Q. And that is applied to the gross make to produce the net make?

A. Yes.

Q. Does it say anything there about steam?

A. No.

Q. Your assumption that that included the cost of steam was, then, not supported by what is found in the report?

A. When I spoke of steam I spoke of line 12,
38598 Gas Production, Undistributed Adjustment—Steam, with a credit in dollars there, a credit to the operating expenses of those amounts.

Q. Referring to Exhibit AA-401, the Astoria tabulation, this is made up substantially in the same manner as Exhibit AA-400, is it not?

A. It is made up the same way, yes.

Q. You included in the years 1913 and 1914, in the coal gas, the expenses of napthalene extraction?

A. I don't remember ever seeing anything on the Annual Reports about napthalene extraction.

Q. You did not find anything in that detail in the P. S. C. reports?

A. I do not remember ever seeing anything in reference to it. I do not remember ever seeing anything about napthalene on them.

Q. Did you find a credit for saturated oil?

A. What year?

Q. 1913 or 1914.

A. Yes.

Q. And you transferred that from coal gas to water gas, did you not?

A. I do not transfer it; I credit it to water gas 38600
as a residual of water gas.

Q. Did you make any inquiries as to whether that was a residual of water gas or coal gas?

A. I remember doing so.

Q. You do remember doing so, do you say?

A. Yes.

Q. Whom did you ask?

A. I think one of Mr. Hine's assistants. It is reported in 1913 as saturated water gas tar and in 1914 as saturated oil.

Q. You did not make any inquiries of the company?

A. I did not. 38601

Q. Or any officers of the company or seek in the books of the company to determine what sort of a product that was, did you?

A. I never referred to the Astoria books on this table. I used this company's books exclusively.

Q. Can you tell what word it is that is obliterated in the footnotes on this page?

A. No.

Q. Didn't you make that footnote?

A. I did, quite a while ago.

Q. How long ago did you make it?

A. Oh, three or four months ago, I should say.

Q. Did you scratch it out on the original or did somebody else do it?

A. I think I did.

Q. Have you now forgotten what the word was?

A. I think it was simply an error of a clerk in reading my writing.

Q. What did you write there, then?

Mr. Clark: I object to that. I do not see anything gained by what was crossed out.

A. I think she made "Brooklyn" out of some other

38603 word.

Q. The word, then, was "Brooklyn" that was obliterated?

A. I do not remember. It was some misinterpretation of my writing, that is all I can remember.

Q. You do not know what you did write?

A. No.

Mr. Chambers: May I interupt the proceedings just a minute? Mr. Cohen is down in the Gas Company's office, and he wants to get some information. There is nobody there who will give it to him unless you authorize it here—by somebody in court.

38604 Mr. Ransom: What is it he wants?

Mr. Chambers: About the 1919 rents.

Mr. Ransom: General Office rents?

Mr. Chambers: Yes.

Mr. Ransom: That was all turned over to Senator Boylan yesterday. If he will go to Mr. Brundage no doubt Mr. Brundage will give him what he wants.

Mr. Chambers: He did. Mr. Brundage said he would not give it to him unless some one here authorized it.

Mr. Ransom: I do not think he saw Mr. Brundage: I understand Mr. Brundage is in Baltimore.

Mr. Chambers: That may be, but that is what he told me he did. I do not know whether he did or not. He is at his office. Will you see that he gets that?

The Master: Tell me, Mr. Chambers, I directed, or it was arranged, that Senator Boylan should have that data.

Mr. Chambers: No, he is working on some different data about the rents for 1919.

The Master: Let him have it and let us get done with these tables.

Mr. Chambers: I did not say the leases. He 38606
wants some information from the books concerning the rents. It is ledgers he wants, I understand.

Mr. Ransom: Maybe Mr. Cohen does not know what he wants.

The Master: Well, that is probably true.

Q. Mr. Frank, we will turn to your gas transferred that you call Schedule No. 28 Exhibit AA-404. How many figures in this exhibit did you personally check?

A. Most of them.

Q. Did you check them directly against the data that was furnished you by the company, that you say you used in making this up? 38607

A. Yes.

Q. And did you check up the footnotes and cross footnotes?

A. No, I only tested those in one or two places. I did not test the mechanical work.

Q. Take, for instance, the first sheet there, 1906.

A. Yes.

Q. You show thousand cubic feet in the first column; in the second column you show what you call the basis charge, which is the amount in dollars charged, without any of the additional charges you

show later. Then you show an average for that, and then a column entitled "10% Added"?

A. Yes.

Q. That ten per cent column is supposed to show amounts equalling ten per cent of those in the first column of dollars; is that right?

A. It shows the figure which you have added on your bills for the ten per cent.

Q. That is supposedly ten per cent of the items in the first column, is it not?

A. Yes, supposed to be.

38609 Q. It is not in the case of the New Amsterdam in 1906—it does not amount to ten per cent, does it?

A. No, it does not.

Mr. Clark: I object to that. His testimony is that he took this from the books.

The Master: I will allow it.

Q. Then in the next column you have "Return on Property Investment"?

A. Yes.

Q. Which represents still another payment, I take it—no, that is a receipt. Now, the sums of the amounts of the three dollar columns that I have referred to show in the column which you entitled "Total

38610 Charge," is that the idea?

A. Should, yes.

Q. Will you take the footnotes and cross footnotes of that New Amsterdam amount and see if that is correct?

A. (Making computation) No, there is a difference there.

Q. Now, take 1907, the New Amsterdam, and cross foot those.

Mr. Clark: I object to this. He has taken these figures from the books. If they want to attack them here, why don't they bring the books?

The Master: Objection overruled.

Mr. Vilas: Why does he not record the figures right?

A. (Making computation) No, they do not agree either.

Q. Did you take your average figures 29.9 cents from the books, or is that a computation by yourself?

A. That is a computation, not by myself.

Q. By some one else, is it not?

A. By someone else, yes.

Q. And that 29.9 really ought to be 29.4, ought it not? 38612

The Master: If he changes his figures, do you mean? On the correct total do you mean? You mean on the correct total it ought to be more?

Mr. Vilas: I am informed on the corrected total it would be.

The Master: I do not think this is useful.

Mr. Vilas: Well, it simply shows that they are not accurate tables.

Mr. Clark: It shows they agree with the books.

Mr. O'Brien: That the books are not accurate.

Mr. Clark: That is what it shows.

Mr. Vilas: Never mind that computation, then, Mr. Frank. I understand it is— 38613

Mr. O'Brien: Say the whole thing, Mr. Vilas; say you were in error.

Mr. Vilas: I have said all I care to.

Q. Take the year 1915. You show a footnote there, footnote D, and have reference to various amounts, among them P. & L. Debits $26,976.69?

A. Where is that figure?

Q. 1915, the last line of the footnotes?

A. Oh, you mean D?

Q. Yes, $26,000. Do you see that amount?

A. Yes.

38614 Charles Frank, Cross.

Q. Where is that derived from?

A. From the profit and loss debits as shown in the operating ledger.

Q. Are those profit and loss debits shown on this statement?

A. Why, I should say yes.

Q. Can you tell me what P. & L. Adjustments, as you call them there, go to make up this item of $26,976.69?

A. That is $120,000. It is a mistake in typewriting.

Q. There is a $100,000 mistake in typewriting

38615 there, is there not?

A. Yes, but the figures above show just what they are.

Q. The last three items of P. & L. adjustments?

A. Yes, it is simply a mistake in typewriting.

Q. Take the table which you have just introduced, Table No. 29.

Mr. Clark: Defendants' Exhibit AA-442.

Q. (Continued) That merely takes off the average price shown on the various sheets of Defendants' Exhibit AA-404?

A. Yes.

Q. Why did you not also show on this table the

38616 general average the same as you did on each sheet of Defendants' Exhibit 404?

Mr. Clark: I object to that. Why should he show it?

The Master: Objection overruled.

A. This table shows those figures; it does not make any attempt to show the general average.

Q. For example, in the 1906 table on Exhibit AA-404 you have shown in the last column each of the items shown on the first line of Exhibit 405, but in the table for 1906 you also show a total average of 35.1 cents.

The Master: You do not mean 405, you mean Defendants' Exhibit AA-422.

Mr. Vilas: 442.

The Master: Yes, Defendants' Exhibit AA-442.

A. There is an average there, yes.

Q. And that is not carried onto the—

A. No, it is not carried onto the next sheet.

Q. Not onto the next table?

A. This shows the amounts received from the different companies and no general average.

The Master: What is shown here on Defend- 38618
ants' Exhibit AA-442?

The Witness: Simply the different companies; that is, the prices paid and received by the different companies.

Q. Taking up your profit and loss adjustment statements which are designated, I believe 129 1/2 and 133 1/2—

The Master: You have two single sheets there that I ordered in as half number exhibits.

A. Yes.

Q. As I understand you state that these should tie onto these previous tables Exhibit AA-129 and Exhibit AA-133? 38619

A. With the exception of the uncollectible bills shown on 129 1/2 and the uncollectible bills being shown separately.

Q. That is shown below your totals?

A. Operating expenses, yes.

Q. And these tables to which these apply, as you state, are tables of operating expenses and production expenses?

A. Yes.

Q. That you have previously put in evidence and have been examined upon?

38620 Charles Frank, Cross.

A. Yes.

Q. You do not wish us to understand, of course, that these items that you show on these profit and loss tables are all of the profit and loss items appearing on the books of the company?

A. They are not all of the profit and loss items; there are a good many others. These are only a small part.

Q. There were a number of others on which you had to exercise some judgment as to whether they were operating expenses or not?

38621 A. Yes.

Q. Where you divide a debit or a credit between two or more years, as you have investments, is your same apportionment in all cases that shown on the company's books, or have you exercised some judgment in that case?

A. There is from sold an apportionment between years in the company's books or in the underlying papers. Most of these, practically all I believe, were made after consultation with Mr. Teele and an examination of the facts upon which he based his division, and I agreed with him in every case.

Q. That is, where there is a division here there is

38622 no departure either from Mr. Teele or from the company's records?

A. No.

Q. Take, for instance, now the debit item in your Table 35, coal shortage 44th Street stock, $31,034.04

A. May I ask to have that repeated?

Q. You have that repeated in 1913, have you not?

A. Which one do you refer to? I did not get that.

Q. The first debit on 35, coal shortage, $31,034.04?

A. Yes.

Q. Didn't you find in the books that that debit had been spread over a number of years prior to 1913?

A. The books show that a debit was made to profit and loss for a coal shortage at 44th Street after the plant was cleaned up, as I remember. I am quite positive there is nothing on the books to indicate when that accumulated. But as a matter of fact it would be very difficult, if not an impossible thing, to determine just when that loss accumulated, because you would have to refer to inventories taken at different periods to determine that; you would have to find out when inventories were taken. 38624

Q. And you did not attempt to arrive at any basis for distributing that debit over the number of years?

A. No.

Q. You were aware that the 44th Street plant shut down about August, 1913?

A. That is my recollection of it.

Q. And that this entry was made in closing out the production account of the station?

A. That is my understanding, yes.

Q. And it would be reasonable to suppose that that debit ought to be distributed over prior years, would it not?

A. Not necessarily. The plant might have been idle 38625
a while in 1913 before it was closed down, and the whole loss accumulated then by reason of theft or something else which could not be determined by looking at the books.

Q. As a matter of fact the books do not show it was idle during a portion of that year, do they?

A. No, I do not think they do.

Q. You find in 1910 a profit and loss item $778.32, rental paid to the City of New York for space occupied by two tracks across 21st Street, Avenues A and B?

A. I find a debit to profit and loss of $778.37, and the bill book of the company shows it was paid to the collector of City revenue, sundry creditors' book, but I never got the voucher on that.

Q. Did you ask for the voucher?

A. I did.

Q. You mean that you failed to get it?

A. Failed to get it after repeated solicitation.

Q. Were you informed it was missing?

A. I was informed it was missing and could not be found.

38627 Q. Did you get any information as to the nature of the item from any other source?

A. I probably had it up with Mr. Teele, but I do not remember, there were so many of those.

Q. Weren't you told it was for rental of space occupied by tracks; didn't you ascertain that in the course of your investigation?

A. I was told that, I believe, yes.

The Master: Well, you could have found out easily enough by going to the Collector of City revenue, could you not?

The Witness: Yes, I acted on what was told me on that.

38628 Q. Why didn't you include it in your profit and loss adjustment affecting operating expenses?

A. I did not hear that question?

The Master: Why didn't you include it in your production expenses?

The Witness: As I recall, I considered it a rental.

Q. You considered it what?

A. A rental item, and so included it in the adjustment of the rentals instead of the operating expenses. I—yes, that is my recollection of it.

Q. As a matter of fact, it really ought to be included in operating expenses, ought it not, Mr. Frank?

The Master: If it was for rent of tracks as described?

A. For the rental of the tracks, yes.

The Master: If it was for that should it be a production expense?

The Witness: It is a pure rental item. I think it ought to be included as a rental.

Q. Don't you think it ought to be included as a miscellaneous works expense?

A. I should say it would be a rental.

Q. There is room for some difference of opinion on that point? 38630

A. Yes, there is room for a difference of opinion on it, but—

Mr. Vilas: That is all.

Mr. Clark: That is all of Mr. Frank?

Mr. Vilas: Yes.

The Master: Next witness.

Mr. Chambers: I had a question I wanted to ask you, Mr. Frank.

By Mr. Chambers:

Q. Do you recall you testified the other day about an entry in the books of the Consolidated Gas Company relating to the purchase of the acreage over at Astoria? 38631

A. Yes.

Q. What was that entry; will you please say what that entry indicates, if anything?

Mr. Ransom: Objected to as incompetent. The entry speaks for itself.

The Master: Objection sustained.

Q. Will you please state some additional explanation in regard to that entry?

Mr. Ransom: Objected to as incompetent

The Master: Objection sustained.

Q. (Continued) That you found from an examination of the company's books?

The Master: The objection is sustained. You can ask the witness to refer to some other entry, in some other book, and I will draw my own inferences. Is there any entry in any other book that bears upon that item?

The Witness: Yes, sir.

By the Master:

Q. What is it?

A. There is an entry in the cash book of January of that year, which shows that the company paid out $500,000 and carried it in a special deposit account

38633 in the National City Bank.

Q. The company paid it out?

A. It drew a check to the National City Bank, Special Deposit Account.

Q. For $500,000?

A. For $500,000, and a ledger account was opened on the books called "Special Deposit National City Bank."

Q. How much did the company pay for that land there?

A. $450,000.

Q. And then the Astoria Company took it on at about $800,000?

38634 A. $750,000, paying partly in cash and paying partly in bonds at 80 per cent.

The Master: Is that all?

Mr. Clark: That is all.

The Master: I had that perfectly clear in my mind.

Q. So that the land on which that plant is built over in Astoria was bought for $450,000 by the Consolidated Company?

A. Yes.

The Master: That is what I wanted.

Mr. Chambers: Now will you cross-examine Mr. Hine?

38635

Mr. Ransom: I am not able to.

Mr. Chambers: I expected you would now at this point. He is here.

Mr. Ransom: There is a great quantity of data that has been asked for by the defendants and it is here.

Mr. Chambers: Will you cross-examine Mr. Silverman when I get him up here?

Mr. Ransom: I will.

Mr. Chambers: When will you be ready for Mr. Hine?

Mr. Ransom: The first thing in the morning.

Mr. Chambers: Then I will get Mr. O'Brien and Dr. Bemis. 38636

The Master: I do not care who goes on so long as I have somebody to go ahead.

Mr. Chambers: The data here, the observed candle power, is on its way and will be here in a few minutes.

The Master: Let us go ahead with our case.

Mr. Ransom: Are you going to get Mr. Silverman here this afternoon?

Mr. Chambers: Yes.

Mr. Ransom: What time?

Mr. Chambers: Mr. Hine is going to telephone to him.

38637

Mr. Ransom: The situation is that I wanted Mr. Vilas to do something else and Mr. Vilas was going to examine Mr. Silverman.

Mr. Vilas: We can dispose of him in twenty minutes.

Mr. Ransom: If it is only a few minutes, are you willing to let that go over to this evening or tomorrow morning?

Mr. Chambers: Yes.

The Master: What will we make it, this evening or tomorrow morning?

38638 John C. Condon, Direct.

Mr. Chambers: Tomorrow morning.

The Master: All right, tomorrow morning. We will have enough to keep us busy with different things until tomorrow morning.

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JOHN C. CONDON, called as a witness on behalf of the defendants, being duly sworn, testified as follows:

38639 DIRECT-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Condon, where do you reside?

A. 174 West 97th Street, New York City.

Q. What is your occupation?

A. Examiner in the Law Department.

Q. Did you serve a subpoena *duces tecum* yesterday on Mr. Nickerson of the Consolidated Gas Company?

A. I did.

Q. And the subpoena was addressed to Henry M. Brundage, was it, Secretary of the Consolidated Gas Company?

A. It was.

Q. You saw Mr. Nickerson?

38640 A. I did.

Q. What did he say?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained.

Mr. Ransom: We admit the service of the subpoena on Mr. Nickerson.

Mr. O'Brien: I will ask, then, the counsel for the complainant if he has produced the following—

Mr. Ransom: I ask that the subpoena be spread on the record.

The Master: Give it to the stenographer and he will make a copy of it.

The subpoena referred to reads as follows:

THE PRESIDENT OF THE UNITED STATES OF AMERICA.

To Henry M. Brundage, Secretary of the Consolidated Gas Co. of New York.

(Seal.)

Greeting:

We command you, that all business and excuses being laid aside, you appear and attend before Hon. Abraham S. Gilbert, Special Master, at the court room now being maintained in the building of the Association of the Bar, 42 West 44th Street, Borough of Manhattan, City of New York, on the 17th day of 38642
February, 1920, at 9:30 o'clock, in the forenoon, to testify and give evidence in a certain action now pending undertermined in the District Court of the United States for the Southern District of New York, between the Consolidated Gas Company of New York, complainant, and Charles S. Newton, as Attorney General, etc., *et al*, defendants on the part of the defendants and that you bring with you and produce at the time and place aforesaid, a certain books, records, reports and papers as follows:

(1) Manufacturing record (original) of 99th St. station showing figures purporting to be operating results of years 1915-1916-1917-1918. 38643

(2) Manufacturing record purporting to be a copy of the above for the same station and the same years handed to Mr. H. H. Edgerton by Mr. Davidson.

(3) Folder containing transferred gas statistics which was loaned by Mr. Carter to Mr. Sangster and returned by letter to Mr. Carter.

(4) Reports, daily, weekly, monthly and yearly of Garage Department for years 1917-1918 and 8 months of 1919.

(5) Papers and records showing expenditures of the Employees Mutual Aid Society.

38643 John C. Condon, Direct.

(6) Salary lists and pay rolls of Utilization Department for 1917, 1918 and 8 months of 1919.

(7) All underlying data, bills, receipts, reports, expenditures of Utilization Department.

(8) All underlying data, books of original entry, papers, bills, reports and receipts of Garage Department for 1917, 1918 and 8 months of 1919.

(9) All the pressure charts for December 1918 and December 1919.

(10) All agency agreements from 1884 to 1918 inclusive.

38645 (11) All underlying data showing details of expenditures of superannuation account, receipts, reports, names, etc. now in your custody, and all other deeds, evidences and writing which you have in your custody or power concerning the premises and for a failure to attend, you will be deemed guilty of a contempt of Court, and liable to pay all loss and damages sustained thereby to the party aggrieved, and forfeit Two hundred and fifty dollars in addition thereto.

Witness, the Hon Learned Hand, Judge of the District Court of the United States for the Southern District of New York, at the Borough of Manhattan, City of New York, the 16th day of February 1920.

38646 ALEX GILCHRIST, Jr.,
Clerk.

William P. Burr,
Attorney for Deft. Edward Swann,
Municipal Building,
Manhattan, New York.

[Endorsed:] U. S. Dist. Court, Southern District of N. Y. Consolidated Gas Company of N. Y. Complainant, vs. Charles S. Newton, as Attorney General, etc., *et al.* Defendants. Subpoena *duces tecum*. William P. Burr, Atty. for Deft. Edward Swann, Municipal Bldg., Manhattan, N. Y. 2/16/20. Served on Frank H. Nickerson, Asst. Sec. Consol. Gas Co. 15th St. & Irving Pl. N. Y. C.

38647

The Master: What is it you want to know, whether the papers called for in the subpoena have been produced?

Mr. O'Brien: Yes.

The Master: Judge Ransom, will you please answer?

Mr. Ransom: So far as they represent records under the control of the company there is an effort made to produce them. It may be that with respect to some of the items the purported description is so indefinite that not all that is desired is here.

38648

The Master: So far as you know the company has attempted to fulfill the requirements of that subpoena?

Mr. Ransom: It surely has, with the exception of one item that calls for matters that are not under the control of the company.

The Master: What is that?

Mr. Ransom: Papers and records showing expenditures of the Employees Mutual Aid Association.

The Master: That is not produced?

Mr. Ransom: That is not produced.

The Master: What else, Mr. O'Brien?

38649

Mr. Ransom: The ledgers are no doubt here and they show such appropriations as have been made or expenditures made by the Consolidated.

The Master: I remember those items. Any more for this witness?

Mr. O'Brien: That is all.

The Master: Next witness.

Mr. O'Brien: I will ask for the papers. I want to offer some of them in evidence now, your Honor.

Mr. Ransom: What do you want? There is a truckload.

38650

The Master: There is a great volume of matter there; call for some particular item or items and you will get them.

Mr. O'Brien: First I call for the two manufacturing records of the 99th Street station for the years 1915 to 1918, and the record that is kept at the office, said to be a copy of the original

Mr. Ransom: There is produced here the manufacturing record of the 99th Street station and also the book at the general office, similarly entitled. What years do you want?

38651 Mr. O'Brien: 1915 to 1918. Let me have it, please?

Mr. Ransom: There is no such book; there is a book from 1916 to 1920.

Mr. O'Brien: I will take that for now.

Mr. Ransom: Well, that is all there is.

Mr. O'Brien: Are these the two books that Mr. Edgerton saw?

Mr. Ransom: Never mind what Mr. Edgerton saw.

Mr. O'Brien: I know what he saw (taking book). Is this the book, Mr. Davidson, that was turned over to Mr. Edgerton?

38652 Mr. Ransom: No.

The Master: I won't have any more of these inquiries. I do not care whether they were or they were not. The books are produced. Now, make some disposition of them.

Mr. O'Brien: I have that in my subpoena, your Honor.

The Master: I do not care what you have in your subpoena.

Mr. O'Brien: The specific book turned over by Mr. Davidson to Mr. Edgerton, I ask is this the book?

The Master: I won't have any more inquiries. You have called for a book and you have it. You are wasting entirely too much time.

Mr. O'Brien: I am not wasting time. I take exception to your Honor's remarks, and I take exception to your Honor's refusing to let me find out the papers I have subpoenaed. Mr Davidson, please take the stand.

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HERBERT C. DAVIDSON, a witness called for the de- 38654
fendants, was sworn and testified as follows:

DIRECT-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Davidson, has Mr. Nickerson produced here the record kept at the office of the 99th Street station, the manufacturing record?

A. Yes, sir.

Q. This is that record (indicating book)?

A. I do not know which one you have there, but one is the office, and one is the general office copy—and one is the station copy, I should say.

Q. One is kept at the station?

A. Yes. 38655

Q. Which one is it, if you can identify it?

A. That is the station copy and that is the general office copy (indicating).

Q. Is this the book that was in court a number of days?

A. Yes.

Q. Is this book kept at the works of the 99th Street station?

A. Yes, that is the book kept at the works, and that was in court down town.

Q. And is this the book, if you know, concerning which I questioned Mr. Woods?

A. I was not present when Mr. Woods was examined, but that is the 99th Street book that was in court, and I would presume so.

Q. There was not any other station record of 99th Street in court but that one?

A. No, not for that period. I do not recall any other period.

Q. I don't recall that that one was broken like this. Mr. Davidson, are you quite sure this is the one?

A. Oh, I am quite sure that that is the station rec-
38657 ord and that is the record which was in court.

A. Mr. Davidson, is this second book to which I call your attention, which you say is the office copy, the book that was turned over to Mr. Edgerton by you?

Mr. Ransom: Objected to as immaterial.

The Master: I will allow it.

Mr. Ransom: Exception.

A. Yes, it was. I told Mr. Edgerton it was a copy—

Q. I did not ask you what you told him; never mind. That is the book?

A. That is the book.

38658 The Master: Major Clark, I am not going to take any more of these candle power gas inspectors today. You can telephone those people to come back tomorrow. All these documents that have been called for will have to be disposed of this afternoon while they are here. We will take Dr. Pemis and Mr. Edgerton. Mr. O'Brien, I cannot spare the time here to have you study these books.

Mr. O'Brien: I am not studying these books. I take exception to your Honor's statement.

The Master: Do you want to offer them in evidence?

38659

Mr. O'Brien: With certain limitations I will, but not until I get the information I want from Mr. Edgerton.

The Master: You ought to have that information before you get the books here.

Mr. O'Brien: I resent your criticism as to what I should or should not do. I want the same opportunity the complainant had.

The Master: If you again, by any statement that you make, insinuate or intimate that I am not giving you the same fair deal that I am giving the other side, or that I am playing any favorites, I will report you to the Court for con- 38660
tempt. I won't have it.

Mr. O'Brien: I am standing on the record in this case.

The Master: I will take what you say.

Mr. O'Brien I am standing on the record in this case.

The Master: You proceed, or offer those books in evidence, or tell me what you want them for, and stop wasting time.

Mr. O'Brien: That is all, Mr. Davidson. I will ask that these be marked for identification.

The Master: I won't permit them to be marked for identification; they are sufficiently 38661
identified. It is a waste of time to mark them for identification.

Mr. O'Brien: The manufacturing book that I asked be marked for identification, we will give the year so we will understand. It is January, 1916, to February, 1920.

The Master: That is the office copy that you just referred to.

Mr. O'Brien: That is the office copy, and the other is—

The Master: The original, the works copy, and it runs from when?

Mr. O'Brien: January, 1916, to February, 1920.

The Master: Now, do you want to offer them in evidence?

Mr. O'Brien: Not at this point.

The Master: At what point? I am not going to have the complainant keep these books here forever. You call for them or I will send them back.

Mr. O'Brien: I am going to look through them to see if they are the books I want.

38663 The Master: Then put them aside somewhere. What other books do you want?

Mr. O'Brien: I call for the reports—daily, weekly, monthly and yearly of the Garage Department for the years 1917, 1918 and 8 months of 1919, and also—that is the fifth item on the subpoena—

The Master: Wait a minute, we will get the fifth item in the subpoena.

Mr. O'Brien: The other one relates to it, your Honor.

The Master: No, we will get the fifth item first.

38664 Mr. Ransom: The reports of the Garage Department are produced. They are not accurately described.

Mr. O'Brien: Mr. Nickerson, will take the stand?

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FRANK H. NICKERSON, a witness called by the defendants, was sworn and testified as follows:

DIRECT-EXAMINATION BY MR. O'BRIEN:

Mr. Ransom: I think I will point out on the record that these witnesses have not been given any notification but merely picked up at random.

The Master: All right; proceed, Mr. O'Brien

Q. Mr. Nickerson, you have produced, have you, all of the reports, daily, weekly, monthly and yearly, of the Garage Department for the years 1917 and 1918 and 8 months of 1919?

Mr. Ransom: I object to the question. There are no such daily, weekly, monthly and yearly reports. There are certain reports.

Mr. O'Brien: I want the witness's statement. The witness is here; you are not under oath.

The Master: The objection is overruled. Have you produced precisely what Mr. O'Brien has called for? 38666

The Witness: In so far as it was possible for us to comply with it.

Q. What is your official position?

A. Assistant secretary.

Q. Is Mr. Brundage at present the secretary of the company?

A. He is.

Q. He succeeded Mr. Carter on February 1st?

The Master: The question is not allowed. I do not care when he succeeded him.

Mr. O'Brien: This is going to the question of the witness's knowledge of what I want in this subpoena. 38667

The Master: The fact that Mr. Brundage succeeded Mr. Carter on February 1st does not help us in the slightest. Next question.

Q. Are there daily reports made from the Garage Department to the main office?

A. None to my knowledge.

Q. Are there daily reports made in the Garage Department to the superintendent of it?

A. I have no knowledge that there are. I presume so, but I have no knowledge.

Q. Have you produced those reports?

A. I believe not.

Q. Why not?

A. Because I have no knowledge that there are any such reports.

Q. But you have said that you presumed that there are such reports?

Mr. Ransom: I object to the question.

The Master: No, I have got to allow the question. The minute the witness starts assuming and guessing about things I must allow it. If he would only answer questions we would not have this. The question is allowed.

38669 A. I do not know.

Q. Did you make any effort to get the daily reports of the Garage Department?

A. I did not.

Q. Why not?

Mr. Ransom: Objected to as immaterial.

The Master: Allowed. If there are any let us have them.

Mr. Ransom: It all relates to what is "reports"?

The Master: We are splitting hairs about something again. Answer the question.

A. There are no daily reports filed in the general office from the Garage Department.

38670 By the Master:

Q. Are there any in the Garage Department?

A. None to my knowledge.

Q. Can't you find out and, if there are, get them here?

A. Yes.

The Master: Well, do it.

By Mr. O'Brien:

Q. Are there weekly reports made out by the head of the Garage Department or anybody under him?

A. I don't know.

Q. Who does know in the company, who would know?

A. I don't know.

Q. Who is the superintendent of the Garage Department?

A. Mr. Middleworth.

Q. Mr. Middleworth?

A. Superintendent at the garage.

Q. M-i-d-d-l-e-w-o-r-t-h?

A. Yes.

Q. What are his initials, his first name is what?

A. I don't recall at the moment. 38672

Mr. Ransom: It is signed to these reports that are produced.

Mr. O'Brien: Will counsel state what his name is so that a subpoena may be served?

Mr. Ransom: I will state what his name is if I can find it. Apparently Henry B. Middleworth.

Q. Are there monthly reports made to the head of the Garage Department by any of his subordinates?

A. Not to my knowledge.

The Master: Get Mr. Middleworth and find out what reports there are.

Mr. O'Brien: Will counsel produce Mr. Middleworth without a subpoena? 38673

Mr. Ransom: No.

Q. Have you taken up Item 8 which relates to—

The Master: No, let us dispose of Item 5.

Mr. O'Brien: I am trying to find out what he did bring.

Mr. Ransom: Here are the monthly reports that are produced.

Q. What papers did you bring here?

A. The monthly reports of the Garage Department and their operations for each month.

Q. Is that all?

A. That covers all their operations.

Q. I ask you if that is all the papers that you produced?

A. It is.

Q. Why have you not produced the papers enumerated in Item 8?

The Master: No, I am talking about Item 5 now. You said the daily, weekly, monthly and yearly reports of the Garage Department.

Mr. Ransom: Item 4.

The Master: Item 5, Mr. O'Brien said.

38675 Mr. Ransom: It is Item 4.

The Master: Let the record show that the witness under the Item 4 has produced the monthly reports under the subpoena specified, with the documents thereto attached. That is all you say there are in the main office?

The Witness: That is correct.

The Master: All right; what do you want to do with Item 4?

Mr. O'Brien: I want to ask him what are the documents annexed to the reports he speaks of.

The Witness: What are they?

Mr. O'Brien: Yes.

38676 Mr. Ransom: Objected to. The papers speak for themselves.

The Master: I will let him describe them generally.

The Witness: I am not familiar with them enough to describe them.

Q. Can you state anything about them, what they contain?

A. The operations of the Garage Department, of the cars, of each car, and the number of hours employed by each car.

Q. Do you know in whose handwriting they are?

A. I do not.

Q. What part of the office did you work in prior to your becoming assistant secretary?

Q. I was statistician of the company.

Q. Did these matters come within your work as statistician, these monthly reports and the data attached to them?

A. They did not.

Q. Have you ever seen before or gathered these papers together—similar reports for other years?

A. I did not get that question exactly, Mr. O'Brien?

Q. Have you ever seen or handled reports of this 38678
kind in other years?

A. I have seen them, yes.

Q. Do you make use of these monthly reports in your statistical work?

A. I do not; no, sir.

Q. Who is there in the company's employ who would be most conversant with these matters so far as the main office is concerned?

A. The Accounting Department, or some one in the employ of the Accounting Department.

Q. And who has taken Mr. Brundage's place in charge of the Accounting Department since his promotion to the secretaryship?

A. I do not know that anyone has. 38679

Q. Who next under him, if you know?

A. Who next under him?

Q. Yes, who should we get, to save time, to bring here to learn something about these reports?

Mr. Ransom: I object to the question.

A. I am next to Mr. Brundage.

Mr. Ransom: The reports speak for themselves. There is nothing unintelligible about those reports.

Q. Is there anybody there who is conversant with them?

A. There must be, yes.

Q. Can you state who?

A. No, I could not.

Q. Have you succeeded to Mr. Brundage's position in charge of the Accountancy Department?

A. I would not say that; no, sir.

Q. What would you say?

Mr. Ransom: Objected to as immaterial.

The Master: Objection overruled.

38681 Mr. Ransom: Exception.

A. I would say that Mr. Brundage had still continued in the same capacity, so far as his relation with the Accounting Department is concerned, that he held heretofore as assistant secretary.

Q. He is continuing the same work?

A. He is.

Q. Would Mr. Addicks know more about the matters?

Mr. Ransom: Objected to. One employee or officer should not be called upon to comment upon another.

The Master: If Mr. Nickerson knows that Mr

38682 Addicks knows more about it he can say so.

A. I do not know that.

Q. Coming to Article 8, have you produced all underlying data, books of original entry, papers, bills, reports and receipts of the Garage Department for 1917, 1918, and 8 months of 1919?

Mr. Ransom: I object to the question. The call or demand is vague and meaningless.

The Master: I will let the witness state whether he has produced anything under Item 8.

A. Nothing any more than might be covered in those monthly reports, your Honor.

The Master: That is all you know about it?

The Witness: That is all I know about it.

Q. Will you state why you have not produced these papers?

Mr. Ransom: Objected to as immaterial.

The Master: Objection sustained. The witness says he does not know of any others.

Q. Are there not receipts in the company's possession for moneys paid out on account of the Garage Department?

A. Receipts for moneys paid out?

Q. Yes. 38684

A. I do not know as the Garage Department pays out any money.

Q. Has not the company receipts for the moneys paid out for the garage, for expenditures in connection with the Garage Department?

A. The company has receipts for all expenses.

Q. Why have you not produced them?

Mr. Ransom: I object to the question. The question is so vague and meaningless, and there is no specification of what number of documents they refer to.

The Master: Yes, you can call for voucher numbers. Have your men go up there and look at 38685 the vouchers and ask for the vouchers you want.

Mr. Ransom: They have looked at these things until they have almost worn them out; then they call for underlying data.

Q. Have you got the records of the employees, the time books of the garage department, in the main office?

A. We have.

Q. They are kept in the Garage Department?

A. They are.

Q. Why have you not produced them?

36680

Mr. Ransom: Objected to. The request is so vague and meaningless it did not call for anything.

The Master: Where is that called for in your subpoena?

Mr. O'Brien: All underlying data.

The Master: That does not mean anything.

Mr. O'Brien: Books of original entry.

The Master: That does not mean anything.

Mr. O'Brien: Papers, bills, reports and receipts.

The Master: I rule that Item 8 in the subpoena is not definite enough to call for what counsel

38687 has just specified.

Mr. O'Brien: Your Honor, don't you think it is possible to get the papers we want?

The Master: Why, certainly. Send your men into their garage. I will direct Mr. Davidson to go with them and to gather all that you want and have it brought here. They will get you every book and paper that you think can possibly be of any use to you. But you have got to tell me what you want.

Mr. O'Brien: I do not assume that the bills and receipts for expenditures, the time books and daily reports, records that show the movement of

38688 these automobiles—

The Master: Is there anybody associated with you and assisting you who knows what you want precisely?

Mr. O'Brien: I know what I want myself.

The Master: Is there anybody you can send?

Mr. O'Brien: It will take up the time of this Court. I will send some one down there if your Honor will appoint the time for him to meet Mr. Davidson.

Mr. Ransom: No.

The Master: Yes, send your man down. Mr. Davidson will go down. Tell him what you want and they will get it for you. Go on, Mr. O'Brien.

Mr. O'Brien: Your Honor, I hope you will not continue driving me the way you are. I have got to take some steps to get this record right.

The Master: I said that because I thought you were going to get into an argument with Mr. Ransom.

Mr. O'Brien: You don't know how it sounds.

The Master: I get impatient because it seems to me that Mr. Clark and Mr. Chambers can go 38690
into the company's offices or send representatives there, and find and get what they want without any trouble, but you always seem to have so much trouble in saying what you want.

Mr. O'Brien: I haven't any trouble at all. I have a lot of this data, and I asked for it and was refused it, and I have to bring it here under subpoena.

The Master: Because you don't state definitely what you want, that is the trouble.

Q. Mr. Nickerson, do you know anything about these various papers?

A. I do not. 38691

Q. Do you know anything about the form of bookkeeping or record that they use?

A. I do not.

Q. Who would be acquainted with that?

A. The Accounting Department.

Q. Who in the Accounting Department might I expect, under subpoena, to tell us the things I want to ask him about, the method of keeping this record?

A. I can't tell you, I don't know.

Q. Would it have to be Mr. Brundage, who is in Baltimore today?

The Master: Then I will take it tomorrow or next day. You can get him.

Mr. O'Brien: May I ask counsel if Mr. Brundage, counsel for the complainant company, is Mr. Brundage is going to be back in town tomorrow?

Mr. Ransom: I don't know.

The Master: Then we will postpone it until he comes back. You need not hurry about that.

Mr. O'Brien: Then I will suspend with Mr. Nickerson and ask Mr. Addicks to take the stand

38603 The Master: If Mr. O'Brien will specify what he wants I am going to see that he gets it.

Mr. O'Brien: I want every paper that pertains to an expenditure.

The Master: That is too indefinite.

Mr. O'Brien: They have been trying that method on the junior accountants, some of them, but they can't try it on me and succeed. I am going to have a frank disclosure, and I am going to have this record made right, and I want to do it with the utmost fairness to all concerned. I have made a simple request for all papers that have to do with the spending of money.

38604 The Master: Mr. Addicks, take the stand.

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WALTER R. ADDICKS, recalled.

DIRECT-EXAMINATION BY MR. O'BRIEN:

Q. The Garage Department is especially under your supervision?

A. Yes.

Q. To what extent does your supervision go?

Mr. Ransom: I object to that as vague and meaningless.

The Master: I will allow it.

A. To the physical side of the garage and the equipment.

Q. That means that you have general supervision over the expenditures made, the expense of running the garage, the purchase of materials for it, and so on?

A. No, rather the physical handling of the cars, the garage and the handling of the cars in the garage, repairs, etc. I would not have knowledge of the requests that come from the garage to the purchasing agent, or the reports to the Accounting Department, except in one particular, and that is in connection with certain petty cash disbursements, carfares, overtime, etc. 38696

Q. You have charge of that, have you?

A. It comes to me before it is paid, for my initial.

Q. Do you vise the expenditures made in the Garage Department?

A. To that extent.

Q. Only to the extent of the petty cash?

A. Yes.

The Master: And overtime? 38697

The Witness: There is some overtime, there is a long sheet that comes in every month.

Q. Are you acquainted with these papers, "Auto Susp." that the witness Nickerson has produced?

The Master: Show them to Mr. Addicks.

A. I am not.

Q. Do they pass through your hands at all?

A. They do not.

Q. Have you outlined the method of keeping accounts for the Garage Department?

A. No, sir.

Q. Did you in your official capacity of one of the vice presidents of the company approve of these penciled reports?

Mr. Ransom: I object to that; there is nothing to indicate those are pencil reports.

The Master: Objection overruled.

Mr. Ransom: Counsel has carefully refrained from using the reports.

The Master: Objection overruled.

Q. Referring to the papers I just handed to you called, "Auto Susp."?

38699 Mr. Ransom: Papers on which appear notations of journal entries.

A. May I have the question repeated?

(Question read.)

A. No.

Q. I will ask you, Mr. Addicks, if you would say that that method of keeping accounts with pencil notations on loose pieces of paper is a good method, worthy of a large corporation?

Mr. Ransom: I object to that. It is not a part of the system of accounts at all.

The Master: Objection sustained.

Mr. O'Brien: Exception.

38700 Q. Who has the regulating of the expenditures of the Garage Department?

A. To some extent I think I have, because in authorizing any work to be done in that way I have something to do with the expenses of the garage.

Q. Well, who determines the extent to which the passenger automobiles are to be used, who may have the use of them, what hours they may be used, and for what purposes they may be used? Is that within your domain and supervision?

A. I think I have knowledge of that.

Q. Well, have you control of it?

A. Yes, under certain regulations that have been made with respect to the use of the cars. To that extent I would see that they are carried out, to the best of my ability.

Q. And those recommendations were made by the Executive Committee?

A. No.

Q. By whom?

A. They would be made by the executive officers of the company and transmitted through me.

Q. Will you say that there made by Mr. Cortelyou? 38702

A. No, I will not, because I do not recall just how they were made. But whatever is done at the garage, I would transmit those orders and they would therefore emanate from me.

Q. Will you state how many officers of the company have machines that are the property of the company and use them?

A. Machines are not assigned to officers of the company. There are certain machines that officers of the company can use, but they are not by special assignment.

Q. Well, who are these officers?

A. Any of the officers of the company and many 38703 of the heads of departments and men who are working under heads of departments. They can call for the cars, if there is a car available.

Q. Do any of the reports rendered to you report who has a car for a particular day?

A. No.

Q. Does Mr. Middleworth keep such a record?

A. I don't know.

Q. You don't know?

A. No, I don't know whether he has that record.

Q. Well, is there such a record?

A. Well, yes, there must be. I will amend that, because I have asked at times who has used cars, and he has reported to me who has used cars, therefore there must be a record.

Q. Is it not a fact that Mr. Cortelyou uses continually a car of this company?

A. Very seldom, that is the exception.

Q. You have a car that you use?

A. I have a car assigned to me; there is a car which I use.

Q. You telephone every time you want it?

38705 A. Yes, but it is not necessarily that car that comes. Whatever car may be in the garage in this service may come in place of that car. If that particular car happens to be in I would probably get that car.

By the Master:

Q. In other words, there is one car that you prefer?

A. That car, if it happens to be in, they send that car.

Q. You would rather have that one?

A. Well, the chief engineer and I—it usually comes for us if we call for it?

By Mr. O'Brien:

38706 Q. Mr. Carter uses a car?

A. Yes.

Q. And Mr. Thomas?

A. Yes.

Q. And Mr. Woods?

A. Yes.

Q. What other officers?

The Master: Oh, the witness has told us. Question not allowed. He has told us that the officers and heads of departments use cars.

The Witness: And many others who are working for the heads of departments.

Q. Who are they?

The Master: Question not allowed.

A. I cannot remember the names.

Q. How many cars are assigned to the use of Mr. Livingston?

A. None.

Q. How many cars has he the use of if he sees fit to ring up and get it?

A. None, but if Mr. Livingston should want a car and should call the garage and there was a car there it would probably be furnished to him.

Q. There is an understanding with Mr. Middleworth 38708
that his request or telephone call will be responded to?

A. I think the use of a car by Mr. Livingston would be rather exceptional.

The Master: Well, he is recognized as one of the men entitled to call for a car if he needs it?

The Witness: If Mr. Livingston should ask for a car, or should come to me I would at once tell them to assign a car to him.

Q. What is the practice? Just confine yourself to that, and get out of that subjunctive mood?

Mr. Ransom: I object to the comment of counsel. 38709

A. I will tell you, Mr. O'Brien, I think Mr. Livingston calls for a car so seldom that I could not say that it was a fact that he could have a car at any time.

The Master: Does he ask for it through you or direct to the department?

The Witness: I have at times, when Mr. Livingston has asked whether he could have a car for a specific purpose, told him that he could.

Q. The report would show the cars, when they go out?

A. If there is a report in the garage of that it should show.

Q. Haven't you a rule that requires somebody to keep a note of when a car is used by the head of a department, when its use began, when it is used by you, or when it is used by Mr. Carter, or when it is used by Mr. Cortelyou, or the engineers, or somebody else that may be doing work for the company, as you say?

A. I have no doubt there is a record. I assume there is a record of who has called for a car, because from time to time I have asked for a list of all people who have used cars, and I have received a list of names. As
38711 to how that record may be kept I don't know. It is a matter of detail that I am not aware of.

Q. Mr. Middleworth would know?

A. Mr. Middleworth would undoubtedly know.

Q. And you haven't any objection to his turning over all reports that he has?

Mr. Ransom: I object to that.

The Master: Objection sustained. It is not for Mr. Addicks to say whether he will or not. I will direct that he do so.

Mr. O'Brien: I ask that these papers called "Auto Susp." be marked for identification.

The Master: I decline to have them marked for
38712 identification. You can offer them in evidence if you want to.

Mr. O'Brien: How are we going to know them?

The Master: If there is any use to be made of them, use them, mark them in evidence. If not, pass them back.

Q. Have you made any rule to guide Mr. Middleworth, any written rules that guide him in the matter of running the garage, so far as passenger cars are concerned?

Mr. Ransom: I object to that.

The Master: I will allow it.

A. I do not recall the rule, but I think there must have been. He must have been given some instructions at some time that certain people would be allowed to use certain cars in what we term our taxicab system; but what those instructions are now I don't remember.

The Master: Do you remember whether that was in writing or not?

The Witness: I don't remember.

Q. You don't recall whether they were written instructions?

A. No. My best recollection is that it was limited 38714
to officers of the company and certain heads of departments, and that those heads of departments had the privilege of having a car for some of their subordinates if needed. That is my best recollection of the instructions.

Q. What checks have you got on the garage to avoid joyrides and things of that kind?

A. If a man takes a car out and takes it out during the day, I don't know that there is any check on that specifically. If a car is assigned to him he can take the car probably where he would want to go. I don't know whether Mr. Middleworth has a record of that or not. I receive every day a record of the cars in the 38715
garage, with the number of the cars.

Q. Is that the extent of the supervision that is exercised over Mr. Middleworth and his men?

A. On that report any car that is used outside of business hours is noted.

The Master: Then you do get daily reports?

The Witness: I get daily reports.

The Master: Where are they?

The Witness: I have reports of the number of cars which are in the garage and available every hour during the day.

Q. Where are the reports?

A. Those reports are sent to Mr. Morris, who acts under my instructions.

The Master: Let us have those reports, Mr Ransom.

Q. Do you know why they were not produced in answer to this subpoena *duces tecum*?

A. I did not know that the subpoena *duces tecum* had been issued at all.

Mr. O'Brien: Will counsel send for those reports?

38717 Mr. Ransom: Yes, in spite of the vague and meaningless character of your subpoena I will get them.

The Master: I have instructed counsel to send for them and they will be here.

Q. Now, Mr. Addicks, do you get a weekly report, too?

A. No, I think I have only these daily reports.

Q. Do you get a monthly report?

A. No, not made up in the form of a monthly report, either.

Q. Can you tell me now briefly what the governor is, the regulator on this department, as to its expenditures, the matter of tires, the matter of gasoline, 38718 the matter of all the other things, the question of repairs?

A. The repairs on every car—there is a form which is sent me every day which shows me what cars are under repair, when it came in, when it is intended it shall go out, and the data as to when it goes out finally.

Q. Well, do you do all of your own repairs?

A. Substantially all.

Q. Does Mr. Morris take care of the detail of all this supervision?

A. Mr. Middleworth reports to Mr. Morris, and Mr. Morris reports to me.

Q. Is that W. Cullen Morris?

A. It is.

Q. And the direct supervision then is up to Mr. Morris, is it?

A. Yes, largely. Things are taken care of by Mr. Morris, and if anything is required he submits it to me for my decision.

Q. If the Executive Committee meets and looks over the account, say for 1919, and it occurred to them that the expenditures are altogether excessive for the 38720
benefit received by the company, and they want to overhaul that department, or criticise and check up the man who is responsible, who would be the man, Mr. Morris, Mr. Middleworth, or you?

Mr. Ransom: I object to that as incompetent.

The Master: I will allow it.

A. I think I would be the one.

Q. And this has been under your domain for a number of years I take it?

The Master: The question is not allowed. It has already been answered several times.

Q. Do you keep a separate report of the cars of the other companies which are kept in the Garage De- 38721
partment?

A. We do.

Q. Are daily reports sent in to you?

A. They are.

Q. And monthly reports, too?

A. Only daily reports. I do not recall that there are any monthly reports.

Q. Then you know the movement of the cars of the other companies?

A. Yes, sir, I know how many cars are in the garage every hour of the 24 hours.

Q. Have you a list of the cars of the other companies?

Mr. Ransom: I object to that as immaterial.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. Is there a separate set of books kept in the garage to cover the detail of the expenditures there for repairs of various kinds, pay roll, oil, etc., of the various companies and the complainant company?

Mr. Ransom: I object to that as immaterial, in that form.

387 23 The Master: I will allow it.

A. I don't know that detail of accounting.

Q. You can't say then in what shape and through what medium—

The Master: Now, Mr. O'Brien, you are subpoenaing Mr. Middlewerth, aren't you?

Mr. O'Brien: Yes.

The Master: You will get it all. What is the use of taking up this time?

Mr. O'Brien: Then I will suspend with Mr. Addicks after asking him one or two questions, and save the time of the Court.

The Master: Why, certainly.

387 24 Q. Mr. Addicks, when you were on the stand, I think it was the last time, I asked you concerning contracts made by the Executive Committee, and we attempted to put the minutes of the Executive Committee in evidence. You produced, or we spoke at that time about a paper which had been turned over to me by some one of the company, called extracts of the minutes of the Executive Committee. Will you look at that now and see if that is a copy so we will have it correct?

A. With respect to oil and coal

38725

Q. And this paper which has been marked Defendants' Exhibit AA-48 for identification, contains excerpts showing all of the action taken—

The Master: I am not going over all this again.

Mr. O'Brien: I just want to describe it, your Honor.

The Master: No, we have had enough of it.

Mr. O'Brien: The contracts for coal and oil.

The Master: The question is not allowed. The Master rules that that paper has been sufficiently discussed.

38726

Mr. O'Brien: Your Honor, at this time, I will offer it in evidence.

The Master: All right, it will take the same exhibit number in evidence, Exhibit AA-48.

Paper received in evidence and marked Defendants' Exhibit AA-48.

Mr. Ransom: Wouldn't you rather have the original with the authentication?

The Master: What is the difference?

Q. Mr. Addicks, you were to prepare excerpts of the minutes covering contracts for other supplies than coal and oil for the same period. Have you done so?

38727

A. They have been prepared, I think they are all ready for me to personally read. In the case of those I personally read the minutes and compared them with the copy and put my initial on every one.

The Master: When will you have the other ready?

The Witness: Well, I have no doubt it is correct.

The Master: I mean when will you have a chance to compare it and certify to it.

The Witness: I don't know. It is a very long proceeding, and it may take me two days.

The Master: Get it as soon as you can.

Mr. O'Brien: Is the operating ledger for 1907 in evidence?

Mr. Ransom: It is in evidence I believe.

The Master: It is.

Q. Mr. Addicks, you still attend meetings of the Executive Committee?

A. I do.

Q. Will you tell me how many shares of stock the complainant company has purchased, how many shares of its own stock the complainant company has purchased since the beginning of this action?

Mr. Ransom: I object to that as incompetent and immaterial.

The Master: Objection sustained. What is that for, the information of the Wall Street Journal, or the information of this case?

Mr. O'Brien: It is a very proper thing in this case, your Honor.

The Master: Go ahead, I sustain the objection.

Mr. O'Brien: I think it should be allowed.

The Master: I can't see it.

Mr. O'Brien: You can't see the effect on a litigation of this kind where they are attacking a statute as unreasonable, and the company goes out into the market and purchases a large number of shares of its own stock, and then writes it up into its books as a profit?

Mr. Ransom: I object to the statement.

The Master: I don't see that it cost them one cent more or one cent less to make gas or to distribute gas.

Mr. O'Brien: I take an exception to your Honor's ruling.

Q. Do you know anything about the details of the record of superannuation accounts?

A. No.

Q. Do you know anything about the pressure charts the custodianship of the pressure charts?

A. Yes.

Q. Have you produced all the pressure charts for December, 1918, and December, 1919?

The Master: The witness says he did not know a subpoena had been issued. How can he answer that question.

Mr. Ransom: The pressure charts called for by 38732
the subpoena are in court.

The Master: That lets Mr. Addicks out.

Mr. O'Brien: Well, the salary lists and pay rolls of the Utilization Department.

Q. Is that under you, Mr. Addicks?

A. No.

Mr. Ransom: The pay rolls called for by the subpoena in so far as the subpoena is intelligible are in court.

Mr. O'Brien: That is all with Mr. Addicks.

The Master: Next witness.

Mr. O'Brien: I ask for the gas transferred—

The Master: Gas transferred records. Go on. 38733

Mr. Ransom: The poor, worn transferred gas records are again in court.

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ROBERT A. CARTER, recalled.

DIRECT-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Carter, this is the paper that you turned over to Mr. Sangster at the conference held by you and me and Mr. Ransom and Mr. Sangster in reference to the subject of transferred gas?

A. I believe it is.

Mr. O'Brien: I offer this in evidence as showing—only for the purpose of showing the method—

The Master: Well, I don't know what your purpose is. Do you want it in evidence?

Mr. O'Brien: I am offering it in evidence as an admission, without conceding that the method of distributing lost gas or unaccounted for gas is a correct method.

The Master: Well, you take your chance on
38735 what a paper shows when you offer it.

Mr. O'Brien: I offer it for that purpose, as an admission.

The Master: You are offering the paper as an admission against interest, are you?

Mr. O'Brien: I am, without assuming or assenting to its correctness.

The Master: Well, you can't help assenting to some things when you offer a paper. The paper will be received.

Mr. O'Brien: It was marked for identification before as Defendants' Exhibit AA-39.

The Master: Change the mark and mark it De-
38736 fendants' Exhibit AA-39, in evidence.

Paper received in evidence and marked Defendants' Exhibit AA-39.

Q. Mr. Carter, does the company keep any records, or do they attempt any supervision of the expenditures of the Employees Mutual Aid Society, or are the payments made to that society turned over to it, and does the matter end there so far as the company is concerned?

A. So far as the company's records are concerned, that is true. I think that one of the officers of the company is an officer of the Mutual Aid Society, so

that the company really knows, if it cares to do so, what disposition is made of the funds of the Mutual Aid Society; there is no secret about it.

The Master: I have not interrupted Mr. Carter's answer, but the record is quite clear on that point. The subject-matter has been fully covered, Mr. O'Brien.

Mr. O'Brien: I recall there was mention made of the by-laws and all—

The Master: Yes, very completely covered. I will not allow any more questions on it.

Mr. O'Brien: Will you permit one more question on it? 38738

The Master: Let us hear it.

Q. Is there any audit made of the society's books, any audit or inspection of its books made by the company?

Mr. Ransom: I object to that as immaterial.

The Master: I will let Mr. Carter say.

A. There is an audit made, but it is not made by the Consolidated Gas Company as the Consolidated Gas Company. There is an audit made of the transactions of the Mutual Aid Society.

The Master: Does that Society employ an accountant to make an audit for it? 38739

The Witness: That is done by an auditing committee of the members.

Q. That is not turned over to you or the complainant company?

A. No, it is kept in the files of the Mutual Aid Society.

Q. You do not attempt to supervise that in any way?

A. Personally?

Q. You or the company?

A. No, as a company we do not.

Q. The Consolidated Gas Company?

A. No.

Q. That is a matter entirely in their own control and domain?

A. Exactly.

Q. Have you any audits or reports of this company member, or officer member of that association as to how they transact their business?

Mr. Ransom: I object to that.

The Master: I will not allow it.

Q. How they make their expenditures?

3871 The Master: Not allowed. It has all been covered.

Mr. O'Brien: That is quite as fair to the company as it is to the consumers.

The Master: But it has been covered.

Mr. O'Brien: Do I understand that counsel objects to it?

The Master: I am objecting to it.

Mr. O'Brien: I think I heard Mr. Ransom's *De profundis* voice here, speaking in the wilderness.

The Master: Mr. O'Brien, I ruled before he made his objection, whether he made one or not. I am ruling it out because the matter was sufficiently covered months and months ago.

3872 Mr. O'Brien: Now, I call for all the agency agreements from 1884 to 1918, inclusive.

Mr. Ransom: Of course there wasn't any such thing as to a large part of that period.

The Master: You had better state what is being delivered.

Mr. Ransom: There is produced the following:

Agreement of the Consolidated Gas Company of New York with the Mutual Gas Light Com

pany, Agency Agreement, dated December 31, 1902.

Agency Agreement between the Standard Gas Light Company and the Consolidated Gas Company, dated March 13, 1902.

Agency Agreement between the Consolidated Gas Company and the Standard Gas Light Company, dated February 6, 1902.

Agency Agreement between the Consolidated Gas Company and the Standard Gas Light Company, dated December 31, 1902.

Agency Agreement between the Consolidated 38744
Gas Light Company and the New Amsterdam Gas Company, dated December 31, 1902.

Mr. O'Brien: I ask that they be marked for identification.

The Master: No, I am not going to waste time marking for identification any more. They are sufficiently identified. Haven't you read these yet, Mr. O'Brien, and Mr. Chambers?

Mr. Chambers: No.

The Master: Suppose you read them after court, or read them in the company's office.

Mr. Ransom: They are printed in the record 38745
of the prior case.

The Master: Let me see one of them, will you?

Mr. O'Brien: Are these all of the agency agreements from 1884 down to date?

Mr. Ransom: I believe so.

Q. Is that the case, Mr. Carter?

A. I believe that is complete.

Q. Are there any supplements to them or readjustments?

A. No, sir.

Q. Or modifications by resolution of either company?

A. None, except in respect of the New Amsterdam. May I look at the New Amsterdam a moment? In respect of the New Amsterdam contract, paragraph 5 of that contract provides that the Consolidated Gas Company of New York agrees that it will at the end of every period of six months during the term of this agreement pay to the New Amsterdam Gas Company interest at the rate of 5 per cent per annum for the previous six months upon the amounts
38747 expended by the New Amsterdam Gas Company in making additions to its Ravenswood works since March 1, 1901, for the purpose of increasing and facilitating the manufacture of gas. I think it was upon the completion of the new water gas plant at Astoria in 1913 or thereabouts—it may have been later—that conditions had changed. The New Amsterdam Gas Company required all of its own capacity, and the Consolidated Company had adequate capacity, or what it deemed to be adequate at that time with this new water gas works plant at Astoria, so that the payment of the 5 per cent to the New Amsterdam was discontinued.

38748 The Master: I was just looking at the New York Mutual contract. From that it would appear that the Consolidated sold to the New York Mutual. Was there any contract in which the Consolidated bought from the New York Mutual?

The Witness: Both these contracts were supposed to work both ways, that is the Consolidated Company agreed to sell to the Mutual and the Mutual to the Consolidated.

The Master: I didn't notice that in the one that I saw. Am I right about this, that the

Consolidated buys and sells from and to the New Amsterdam, the Mutual and the Standard?

The Witness: Yes, with this difference in respect to the Mutual Company also, that the Consolidated Company is under agreement to pay the New York Mutual Gas Light Company the carrying costs on 10,000,000, approximately, 10,000,000 cubic feet of plant capacity which is devoted by the Mutual Company to the requirements of the Consolidated.

The Master: Let me see that contract.

The Witness: That contract is not here, it 38750
is not one of the agency agreements. This subpoena calls for the agency agreements.

The Master: Where is that other contract?

The Witness: It is only a year or two old. I do not think the papers are here in evidence I haven't with me the agreements under which that is paid. I will bring that agreement here.

Mr. Ransom: Was that in the Woods' report?

The Witness: It is in the Woods' report.

Mr. Ransom: I offered that on one or two different occasions and your Honor excluded it.

Mr. O'Brien: Will you kindly mark this for 38751
identification?

The Master: No.

Mr. O'Brien: I want to know what they have produced and have them identified.

The Master: It has been spread on the record. I am not going to assume that the Gas Company or its officers or subordinates are going to destroy, mutilate, lose or otherwise change papers that are identified here by names and dates.

The Witness: They have been preserved for twenty years.

Mr. O'Brien: We have already had from the witness a statement of another paper bearing on the relations between the Consolidated Company and the Mutual Company. That has not been produced.

Mr. Ransom: It has been offered in evidence.

Mr. O'Brien: He simply says it is not an agency agreement, and that is why I thought we had better mark these papers for identification, so we will know the exact ones that have been given to us.

38753 The Master: Mr. Ransom has described on the record precisely what has been produced here.

Q. Then Mr. Carter, going back to my former question, without giving us the details of what is claimed to be covered by the contracts, but just to identify the agreement, will you state what other agreements than those which have been produced here today had been entered into by the companies, and on what subject matters?

Mr. Ransom: I think the question is too vague.

The Master: I think it is vague, but I think I know what Mr. O'Brien wants, and probably Mr.

38754 Carter does also.

Have there been any other agreements, Mr. Carter, which bear upon this question as transferred or exchanged gas, such as the agreement, for instance, you have just told us about with the Mutual?

The Witness: Agreements have been made during the past five years, I think possibly three, providing for a division—

Q. Describe them generally?

A. Providing for a division between the companies benefited thereby of the cost of carrying certain

jointly used facilities which include the two tunnels, that is the Ravenswood Tunnel and the Astoria Tunnel, the connecting mains in Queens, the 60 inch and 48 inch mains, the connecting mains in the Bronx and under the Harlem River, and the 48 inch main in New York City from the Harlem River to Ravenswood Tunnel at 71st Street. Those agreements have been modified from time to time beginning with I think and covering 1914, latter part of 1914, and subsequent years down to date.

The Master: Let us have them in court tonight at eight o'clock. 38756

The Witness: Yes, sir.

Mr. Ransom: These are what are called joint facility reports of Mr. Woods.

The Witness: Yes, they became agreements by resolutions of the respective companies.

Mr. Ransom: All these reports have hitherto been offered in evidence. One was received and one was rejected.

The Master: Let us have the papers that Mr. Carter speaks about, and we will see what we will do about it.

Mr. O'Brien: I move to strike out the statement of Mr. Carter as to whether it is an agreement or not. I asked the witness to describe in general terms any agreements. 38757

The Master: He says those are agreements. They don't have to be in writing.

Q. Were there any modifications of the contracts covering the rental of the East River and Astoria Tunnels made during the year 1918 or 1919?

A. The agreement now in force between the companies for the division of the carrying cost of these jointly used facilities has been in force since January

1, 1919. I think none of them have been modified so as to apply to any portion of a year. The modification has in every case covered a calendar year.

Q. Have they been modified annually since they were entered into?

A. Not annually, no, but they will speak for themselves when they are presented in that regard.

Q. Prior to January 1, 1919, what was the last modification?

Mr. Ransom: I object to that; the papers speak for themselves.

38759 The Master: I will let Mr. Carter say.

A. I won't be certain whether the prior agreement covered the years 1917 and 1918 only, or included the year 1916.

The Master: It was either two or three years?

The Witness: Two or three years.

Mr. Ransom: My recollection is that the 1916 resolution was offered by Mr. O'Brien.

The Master: Let us get to something else.

Mr. O'Brien: I call for the salary lists and pay rolls of the Utilization Department.

Mr. Ransom: They are here. I don't know just where they are. Mr. Davidson has been called to the telephone. I have the superannuation records here if you will use them.

38760

Mr. O'Brien: Yes.

The Master: The record will note that the superannuation items, called for under Item 11 of the subpoena, are produced. Do you want to make any disposition of these, Mr. O'Brien?

Mr. O'Brien: Yes.

The Master: Then dispose of it.

Q. Mr. Carter, is this particular account under the supervision of some special officer?

The Master: I will not allow the question. We have had enough about superannuation.

Mr. O'Brien: I propose to ask Mr. Carter or some witness who has particular charge of this—

The Master: I don't propose to permit any further inquiry on that subject.

Mr. O'Brien: The rules and regulations and the methods that applies to expenditures of this kind.

The Master: I will not allow it. I say it is sufficiently covered. Documents are produced here that you may offer in evidence if you deem 38762
it necessary.

Mr. O'Brien: Of course I am going to offend if I ask another question, I assume?

The Master: Ask one more, and we won't worry about being offended, and maybe you will have a clear record.

Mr. O'Brien: I appreciate we have had something in the record about this, but if we have the witness who has charge of this we will have a clean-cut statement as to who regulates it, what one has to have to qualify, the matter of getting the superannuation salaries, and all this. I want to ask two or three questions about it. 38763

The Master: I will not allow it.

Mr. O'Brien: The subpoena, Item 11, calls for all underlying data showing details of expenditures of superannuation account, receipts, reports, names, etc.

Q. Have those been produced, Mr. Carter, all of the things specified in the subpoena?

The Master: Counsel for complainant has handed the Master an envelope which on the face of it shows various dates and other memoranda, including the following:

"Consolidated Gas Company, pay roll, superannuation account for the month of May, 1918," and other months. The one I am referring to happens to be May. It apparently contains all the information called for by the subpoena. I will not allow the question.

Mr. O'Brien: Then your Honor rules that the papers produced comply with the subpoena that calls for all underlying data showing details of expenditures of the superannuation account, receipts, reports, names, etc.?

38765 The Master: Yes, I rule that the papers produced comply with the subpoena.

Mr. O'Brien: I will ask the Master if that has the length of service?

The Master: Look at it, I don't know.

Mr. O'Brien: They are not in evidence yet.

The Master: You can look at them.

Mr. O'Brien: Without any penalties?

The Master: You don't understand the ruling apparently. My ruling was and is that if a witness has a paper which he produced, and which is part of a cross-examination, and you say, "Let me see that paper," that the minute you call for

38766 the paper it can be offered in evidence. That is the only rule I have enforced.

Mr. O'Brien: I except to your Honor's ruling that the papers produced answers the requirements of the subpoena.

Q. Mr. Carter, is there a particular record kept that shows the details, the length of service, the details of superannuation account—is there some book that has that especially?

A. The minutes of the Executive Committee record in full, the reason for putting a man, the length of his

service, the amount, and indicates that he is on at the pleasure of the board.

Q. Is there any book or record that will show the detail?

A. Nothing but that.

Q. There is no place then that we might refer to to find out whether or not in our humble opinion there has been carelessness or extravagance—

The Master: Mr. O'Brien, you need not press that question any further, because I shall give you a square-cut ruling on the record, that I shall not accept any proof by you or the opinion of 38768
anybody living or dead that the judgment of these officers of this company was not properly exercised in putting a man on superannuation. That is stretching the rubber entirely too thin, and I won't permit it to be done. Take your exception to my ruling. That disposes of superannuation.

Mr. O'Brien: That practically means—

The Master: That I am not going to let you review the action of the officers in putting a man on superannuation.

Mr. O'Brien: Either as to the recipient, or to the amount given, or the term during which it 38769
is given?

The Master: No, it is a pure matter of internal policy that I will not permit evidence to affect.

Mr. O'Brien: It is internal policy, it is a *sanctum sanctorum* in the company?

The Master: Yes.

Mr. O'Brien: To which the eyes or the hands of counsel for the defendants may not protrude?

The Master: Precisely, any more than you al-

38770

ready have. If there is something that these officers cannot be trusted for, let us get it.

Mr. Clark: Does it have a bearing on it that they possibly have not collected the money with which to pay this superannuation during the time a man was on the pay roll? Why should the consumers pay a superannuation item which is based on past service?

The Master: Because I think it is proper. You have my ruling, I have ruled squarely that the consumers of the Gas Company in the year 1920 must pay as a proper expense of running
38771 this business the amounts paid monthly to superannuated employees.

Mr. Clark: Regardless of whether any amount was collected in the past for that purpose?

The Master: Yes.

Mr. O'Brien: You have ruled now, it is a sweeping rule you have made, that we have no right to criticise it no matter what the amount is—

The Master: Right.

Mr. O'Brien: No matter what the conditions are under which the resolution, if there was such a resolution, was passed by the Executive Com-
38772 mittee?

The Master: Yes.

Mr. O'Brien: And everything goes in effect with your ruling?

The Master: Yes.

Mr. O'Brien: That covers it.

The Master: I am not going to balance the question of judgment in that regard, and I won't take evidence on it.

Mr. Chambers: Exception.

Mr. O'Brien: That is quite clean-cut, and it

38773

shows where you stand and where we stand, and I take an exception to it.

The Master: That is the only way to get a ruling.

Mr. Ransom: I produce the pressure charts called for by Item No. 9 of the subpoena.

Mr. O'Brien: Will you keep them here until tomorrow morning?

The Master: No, dispose of it now. What do you want them for?

Mr. O'Brien: I want them when the witness Edgerton is on the stand.

The Master: Put him on now. He is around 38774
here, isn't he?

Mr. O'Brien: He is not ready to be put on the stand.

The Master: You can't postpone things that way. Whom are you going to put on now?

Mr. O'Brien: I am going to put Dr. Bemis on.

Mr. Ransom: Let us clean up the rest of this—

Mr. O'Brien: Oh, you can't clean me up. You will be a dead man before we get through with this case if you attempt to drive me. I
didn't take fifteen minutes as you did the other 38775
day when the Master himself had to remind you to hurry up.

Mr. Ransom: The Master has often reminded me to hurry up the same as he has you.

Mr. O'Brien: The record speaks for itself. I offer in evidence the superannuation papers, three envelopes, for the years 1917, 1918 and 1919, twelve envelopes in each bundle.

The Master: There are three bundles, each containing twelve envelopes?

Mr. O'Brien: I do not offer the last four of 1919.

The Master: All right. The first eight months of 1919, all of 1918 and all of 1917 are received in evidence as one exhibit.

Three bundles of papers each marked Defendants' Exhibit XX-443.

Mr. Ransom: I offer the other four in evidence.

The Master: No, I don't think they bear on the other twenty.

Mr. Ransom: I would like to make the record complete for the year.

38777 The Master: No. I am doubtful whether I can let you complete it for the year. I think we have to draw the line somewhat. You made your case complete as to the first eight months. If I open it now for the next four months this thing will run on another three months. I don't think I will do it.

Mr. Ransom: Exception.

Mr. O'Brien: Will your Honor recall Mr. Davidson?

The Master: What for?

Mr. O'Brien: I want to ask him about these books.

38778 Mr. Ransom: I don't know why Mr. Davidson is the witness regarding these books.

The Master: Call Mr. Davidson.

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HERBERT C. DAVIDSON, recalled:

DIRECT-EXAMINATION BY MR. O'BRIEN:

Q. Mr. Davidson, are you quite sure that this is the original book from the manufacturing station?

A. I don't know which book you have there, but I am sure that the two books I brought—

Q. I have this one here that is broken.

A. I am sure that is the book from the manufacturing station.

Q. And you are sure that this is the book that was produced in court?

A. Yes.

Q. Is there any other book a copy of this anywhere that you know of?

A. Do you mean beyond the station copy?

Q. Yes, sir.

A. None other to my knowledge.

Q. Is there anywhere that you know of any other 38780
copy of this, what you call the office copy?

The Master: General office copy.

A. No, no copy of either, so far as I know.

Mr. O'Brien: I offer in evidence detail record of manufacture of the 99th Street station, so much of it as appears in the month of May, 1919, under the columns on the left-hand page embraced within the general heading, "Manufacturing Averages."

Mr. Ransom: That is from the general office copy.

Mr. O'Brien: "Manufacturing Averages," that is the first general column; "Water," the second; 38781
"Oil Account," the third. I offer those three general columns: "Manufacturing Averages," "Water" and "Oil Account."

Mr. Ransom: I object unless the entire document is received.

The Master: I will receive so much of it as Mr. O'Brien wants to offer. Mark the book on the fly leaf, and the record will show the part of the book that Mr. O'Brien has offered.

Mr. Ransom: It appears that he is offering from the general office record.

38782

The Master: Yes, that is all right.

Mr. O'Brien: I now offer in evidence so much of the detail record of manufacturing book of the 99th Street station for the month of May, 1919, as is embraced on the left-hand page for that month under the columns, the individual columns under the general heading, "Manufacturing Averages"; "Water"; "Oil Account."

Fly leaf of book marked Defendants' Exhibit AA-444.

Mr. Ransom: I object to the offer on the ground that your Honor very clearly and specifically indicated at the time Mr. O'Brien had this book in court, and used it in his lengthy cross-examination of the witness Woods, that you considered it in evidence, and that when I made a specific offer of it in evidence, your Honor indicated that you regarded it as already in.

38783

The Master: The book will be marked. I take it that what you are calling attention to now are the corresponding items in the original book of manufacture of the general office copy.

Mr. O'Brien: Yes.

The Master: Mark the fly leaf of the original.

38784

Fly leaf of book marked Defendants' Exhibit AA-445.

The Master: Now, Mr. O'Brien, I ask you to state in what respect they differ, and the purpose of your offer?

Mr. O'Brien: I have made a statement several times to your Honor which I promised to substantiate as to the differences between the books that were turned over and the books that were really the actual books.

38785

The Master: No, you say these two books differ, do you?

Mr. O'Brien: I do.

The Master: Just tell me how they differ?

Mr. Ransom: I object to this. The record clearly shows the way in which this so-called general office copy is made, the way in which it is in the first instance made up, and in the second instance the way it is checked up during the following months.

The Master: I want Mr. O'Brien to state what his claim is.

38786

Mr. O'Brien: The first column here in the original record, that is the works book, under the column, "Oil" we have 3.97; in the office copy we have that same number and a line drawn through it, and over it 3.80.

The next line, 3.94, we have in the works copy; in the office copy we have the same number scratched and over it is written 3.73.

For the third day of the month we have 3.85 in the works copy; in the office copy we have 3.85 with a line drawn through it, and over it 3.65.

Next we have 3.96 in the works book; in the office copy 3.96 scratched out and over it 3.74.

38787

The Master: You need not read any more. I see your point.

Mr. O'Brien: And so on, the numbers ranging down to 3.57.

The Master: Are there any other columns in which there are changes?

Mr. O'Brien: Yes.

The Master: In what other columns are there changes?

Mr. O'Brien: In the works copy under the title, "Gas Oil" the subdivision under the general

38788 account oil account we have the total number of gallons given in red ink as 482,040. That has pencil lines drawn through it, and over it is written 220,190.

In the office copy all of the columns, all of the first four columns under oil account have a red line drawn through them. In the original book that is the works book, there are no entries made under the last three columns of the general column "Oil Account," which are entitled, "Gallons Received," "Gallons Used," "Gallons on Hand," yet in the office copy under the title "Gas Oil,"

38789 in these three columns there are a number of entries made which are not contained in the original.

The Master: The Master notes the condition of the so-called office copy as compared with the original works copy for the month of May, 1919, at the 99th Street station. I think it would be better if photostatic copies were made of those two sections, so we can put it in the record with such explanation as may be applicable to it.

Mr. Ransom: It is readily explicable. Even Ballinger ought to have understood it.

Mr. O'Brien: I call the Master's attention further—

38790

The Master: Don't waste any more time, because we are going to have photostatic copies in the record.

Mr. O'Brien: I show you right here the erasures that have been made in the original works book at the bottom, where there was certain inscriptions, also the erasures that have been made under some of these columns under the title, "Oil."

The Master: I have noted the condition. We will have photostatic copies made of it, and then we will have it in the record as an exhibit.

38791

Mr. Ransom: It is already in the record, isn't it?

The Master: What I mean is, a picture of it.

Mr. O'Brien: I now call your Honor's attention to the fact that on the other side of the page, which has not yet been marked in evidence—

The Master: The whole book is in evidence. You are using a part of a book that is marked in evidence.

Mr. O'Brien: Well, it really was not formally offered in evidence.

The Master: Both books are in evidence. 38792

Mr. O'Brien: You are so ruling?

The Master: Yes.

Mr. O'Brien: I call your attention to the column entitled "Tank Yard Fuel" in the original book, where there are various entries made from Thursday the 22nd down to the end of the month, showing Seaboard coke, Astoria coke, in separate columns, "Coke Used," "Coke in Pounds on Hand." Various entries are made for those days in the original book which are entirely omitted from the office copy. We will not take up time with other comparisons. They are quite numerous. 38793

The Master: They are all in May, 1919, are they not?

Mr. O'Brien: If your Honor rules that these books are in evidence—no, I do not confine my criticism to that. The one I am pointing out to the Court now is May, 1918. His Honor has ruled that these are in evidence over our exceptions.

Mr. Ransom: No exception was noted.

Mr. O'Brien: It is noted now, to the ruling of the Court, if it was not noted before. The fact

38794 is that there is a general understanding that we are excepting to all your Honor's ruling. That being so, I will not take up the time of the Court at this time to make further comparisons in other months. That can be done in our brief.

The Master: Which brief? We might as well make this note in the record. I am not joking when I say that there will be no time for briefs. I shall expect counsel to be familiar enough with their views and the record in this case when the evidence is closed to be able to give me their views and point out the particular parts of the
38795 record which they claim supports their contentions.

Mr. O'Brien: Do you think that where we have been trying a case for seven months, or more, say eight months, that we should be expected to proceed at once at the close of the case to point out our views to you without preparing a brief, without going over and collating the testimony?

The Master: Yes, you ought to have your notes so complete and full as to proceed to put in your contentions, if you know precisely what evidence you have put in and what has been testified to.

38796 Mr. O'Brien: I am glad you have put that in the record, and have stated that you are not going to let us file briefs.

The Master: I have said that. It would take six months to present briefs.

Mr. O'Brien: Going on from 9:30 to 6 o'clock in the trial of the case—

The Master: Yes.

Mr. O'Brien: It is superhuman, it can't be done with justice to our clients. It will be the cause of a retrial.

38797

The Master: It has been done before, and it can be done again. Cases have been tried in the criminal courts particularly in this Federal District that have taken months, and when the case is in counsel have been required to sum up. This case is no different.

Mr. O'Brien: All right, you can take your position, that is your privilege. My exception will be noted to it right here and now, and at the time you actually take it.

The Master: Are you through with Mr. Davidson?

Mr. O'Brien: Yes, I think so. 38798

Mr. Ransom: Do you want any of the rest of these documents you have called for?

Mr. O'Brien: Item No. 6, I call upon the complainant to produce, as per the subpoena *duces tecum* previously spread upon the record, the salary list and pay roll of the Utilization Department, for 1917, 1918 and 8 months of 1919, and also Item No. 7 of the said subpoena.

The Master: Take one at a time. No. 6 now, Utilization pay roll.

Mr. Ransom: The Utilization Department pay rolls are, of course, a part of the general pay rolls. There is produced here— 38799

Mr. O'Brien (interrupting): I do not concede that at all.

Mr. Ransom: There is produced here—

Mr. O'Brien: Here, because we have forced you to bring them here.

Mr. Ransom: There is produced the weekly—the book entitled "Consolidated Gas Company of New York, Weekly Pay rolls, General Office" in which you will find the Utilization Department pay rolls.

The Master: For what period?

38800 Herbert C. Davidson, Direct.

The Witness: This covers the year 1919; 1917 and 1918 is in a separate binder.

The Master: Mr. Davidson, does this book now produced give us—do these books now produced—

Q. (Interrupting.) Do these books produced give us the salary lists and the pay rolls of the Utilization Department for 1917 and 1918, and 8 months of 1919, the salary lists and pay rolls?

A. Yes, sir. The salary lists—the pay roll itself is the salary list, unless you consider the pay rolls
38801 the weekly, and the salary lists the monthly. They are both here.

Q. Well, will you give us the pages of the record

A. It will be on each pay roll—

The Master: Are the pages numbered?

The Witness: No.

Q. I want both. I want the details of the Utilization Department. I have asked the complainants to prove their case, and I am going to bring it into the record here and have it made part of the story, and I asked Mr. Carter to tell us all about this Utilization Department.

The Master: Too late. You have had all you
38802 are going to have on that.

Mr. O'Brien: Your Honor says ha ha with a whole lot of grief.

The Master: No, you cannot start trying this case all over again. We had this last September and October.

Mr. Ransom: I now produce also what is called the General Office Monthly Pay Rolls for the various months and included in this General Office Monthly Pay Roll are shown such employees or officers of the Utilization Department as are paid on a monthly basis.

Mr. O'Brien: I do not want Mr. Ransom to testify any more in the case. I am going to ask Mr. Davidson about what it contains, if you will pass it over to me. I do not want you coming in here explaining what they have brought. That is some more Ransomese stuff, and it don't get over.

Q. Mr. Davidson, will you designate the pages of that book?

Mr. Ransom: Are the pages numbered?

The Witness: The pages are not numbered, they are—

38804

The Master: That is enough. The pages are not numbered. What is your next question?

Mr. O'Brien: I want to make a certain exhibit of this part that relates—

The Master (interrupting): Well, offer it.

Q. Will you give us the pages there that refer particularly to the Utilization Department, Mr. Davidson?

Mr. Ransom: I object to it.

The Master: The question is not allowed, the pages are not numbered, and the pay rolls for each month, as the Master notes, it contains a section applicable to the Utilization Department.

38805

Mr. Ransom: Generally on the third page, I think it is.

The Witness: That is right.

The Master: Mr. O'Brien can mark the book in evidence and pick out what he wants out of it.

Mr. O'Brien: I will do that, your Honor.

The Master: You offer the book in evidence?

Mr. O'Brien: I offer the book in evidence.

The Master: This is the monthly book, is it?

The Witness: This is the monthly pay roll.

The Master: Covering the entire period 1917, 1918 and 8 months of 1919?

The Witness: Yes, sir.

The Master: Mark that book.

Book marked Defendants' Exhibit AA-440.

The Master: Now, as I understand it, under the head of Utilization Department, usually on the third page, will be found the names of all employes in that department for that month who are paid by the month, as distinguished from em-

38807 ployees who are paid by the week?

The Witness: Yes, sir.

The Master: Whose names will be found in the other books containing the weekly pay rolls?

The Witness: That is right.

By Mr. O'Brien:

Q. Now, will you point out that distribution here?

The Master: Taking what month?

The Witness: I happen to have December, 1919.

The Master: And you are pointing out which sheet, of December?

The Witness: I am pointing to the third page

38808 of the December monthly pay roll.

The Master: Of what year?

The Witness: December, 1919, the month ended December 31, 1919. I read, "Utilization Department, General expense," the first column reading, the caption, "Classification," and shows $1,150.83.

Q. What does that mean?

A. That is the classification of the pay roll, and that is the item that is posted to the ledger. The names of the individual men, and the amounts paid to each appear below that, equalling in total the amount

charged to the Ledger, and that practice obtained, I believe, throughout this period.

Q. Now, these men are in this department—you were on December 31. Turn over. That is not a month I am on. Take it back in May. Who is Burnett, is he on the Utilization Department pay roll?

A. I do not know, I don't recognize it.

Q. You don't recognize Burnett?

A. I would say that was Bennett, not Burnett.

Q. Do you now who he is?

A. There is a Bennett in the Utilization Department. 38810

Q. And what does this inscription say?

A. General Suspense, or the entire slip reads salary of G. E. Bennett, $208.33 for May pay roll; general suspense Peerless Range Pattern $104.16, Promotion Expense Utilization Department General Expense $104.17, that is a distribution of his salary.

Q. For this month of May, will you just give us the pay roll?

The Master: No, it is in evidence.

Q. Who is Mr. Rasch, and what does he do?

The Master: Question not allowed.

Q. What does Mr. Bennett do?

The Master: Not allowed. 38811

Mr. O'Brien: Exception.

Q. What does Mr. R. E. Howes do?

The Master: Question not allowed.

Q. What does Mr. R. A. Palmer do?

The Master: I don't want any more questions.

Mr. O'Brien: Exception to each of your rulings.

Q. Will you state whether or not you know any of those men?

A. I know most of them.

The Master: Do you know all of the employees of the gas company?

The Witness: I cannot say that I do.

The Master: In the Utilization Department?

The Witness: I know some of the men there, some I know to speak to, without knowing their names.

Q. Do you know Mr. Scofield?

A. I do.

Q. Do you know what he does?

Mr. Ransom: Objected to as incompetent, im-

38813 material.

The Master: Just for the record, I am going to let Mr. Davidson say, and that is all I will do.

A. I am not in a position on that to say what the men in that department do, other than in a hearsay manner.

The Master: All you know is that he is in that department?

The Witness: I know that he is in that department, yes.

Q. Don't you audit these books?

Mr. Ransom: Objected to.

38814 The Master: Question not allowed.

Mr. O'Brien: I understood Judge Ransom to object to that?

Mr. Ransom: I surely did.

Mr. O'Brien: You are going to shut the door to examination as to who these men are?

Mr. Ransom: I shall make such objections as I see fit, and such of them as the Master sustains, I take it, will not be answered.

Mr. O'Brien: Well, you are willing to go on record as barring our bringing out from the witness the statement as to what these men do?

The Master: Mr. Ransom will not answer the question.

Q. Who does know what they do?

The Master: The question is not allowed.

Mr. O'Brien: Exception.

Q. Who is the head of that department?

The Master: Not allowed.

Q. What was the total amount for the month of May of the salaried men in that department?

Mr. Ransom: I object to it.

The Master: Question is not allowed.

Mr. O'Brien: Will you Honor permit that to 38816
be put on the record at this time?

The Master: I will not.

Mr. O'Brien: Well, you spoke a minute ago about requiring counsel at the close of the case to proceed at once and sum up and give you their views. The record in this case, just as you will see from this particular instance, cannot be given attention by your Honor unless these matters are brought out as we go along, unless further you get tabulations of all the various matters that come up.

Mr. Ransom: The tabulations are in.

The Master: My ruling, Mr. O'Brien, is that 38817
the time has long since passed when you can spend any more time on matters of this kind. When Mr. Brundage, or whatever his name is, was on the stand, you had a perfect right, in fact, I think you had those pay roll sheets, I remember them being in court, you had a perfect right to ask him any of those questions, and I won't let you go into it now.

Mr. Ransom: Mr. Carter testified to what different men in that department did.

38818 Herbert C. Davidson, Direct.

Mr. O'Brien: He certainly testified on that subject.

The Master: Next question.

Q. But just tell me for each month, the employes shown?

The Master: I won't allow that. Take the first report in the book, and save time, and tell me what month it is, and what sheet of that report is utilization.

Mr. Ransom: You mean the pay roll, not the report.

38819 The Master: Yes, the pay roll.

The Witness: I have before me the pay roll for the week ended December 27, 1919, and the Utilization Department Weekly Employees appear on the 3rd page of that pay roll.

The Master: Next question.

Q. Do you know these employes personally?

The Master: I won't allow the question.

Mr. O'Brien: Exception.

Q. Did you audit these accounts?

The Master: I won't allow the question.

Q. Did you audit the pay rolls at all?

The Master: Not allowed.

38820 Mr. O'Brien: Exception.

Q. Have you in your possession reports of the Utilization Department?

The Master: Not allowed.

Q. Which branch of the company's offices may the reports of the Utilization Department be found on file in?

The Master: Not allowed.

Mr. O'Brien: Exception. I will offer this in evidence, your Honor.

The Master: Yes, that is the book containing the weekly pay rolls.

Mr. O'Brien: As an admission against interest.

The Master: From December 27, 1919, back to what date?

The Witness: January 4, 1919, in this book, that is the pay rolls of the year 1919 are in this book.

Mr. O'Brien: Were the pay rolls offered in evidence before? I think they were.

The Master: Whether they were or not I don't know. I know we used them in the cross-examination of witnesses. 38822

Mr. O'Brien: Yes.

The Master: And I have deemed all the underlying data, all of the books and records of the Gas Company in evidence, because you and your associates and your assistants have all had access to them.

Mr. O'Brien: Well, I take exception to any such ruling at this time.

The Master: And either side may offer and spread on the record any particular item.

Mr. O'Brien: Don't you remember that was the objection we made to the books going in?

The Master: I know it. 38823

Mr. O'Brien: That they had not proven the underlying data.

The Master: I know that. Do you want this book marked 1919 weekly pay rolls offered in evidence and marked?

Mr. O'Brien: You have just stated it was already in.

The Master: No, I will mark them specifically.

Mr. O'Brien: And I am not offering it for 1919.

The Master: You are not offering it?

Mr. O'Brien: No.

The Master: Then you don't want the book marked?

Mr. O'Brien: I want the book marked as to the first eight months of 1919, without assenting to the correctness or the reasonableness of the figures, but they are admissions against interest.

The Master: I will limit the 1919 material to the eight months at this time. My present disposition is to hold this case to the end of the
38823 eight months' period, so as not to start trying a case all over again. You can mark this book.

Mr. O'Brien: You understand the limitations under which I make the offer?

The Master: I do not know that you can limit it. I know what you are trying to do. Mark the book.

Book marked Defendants' Exhibit AA-447.

The Master: The other book contains all of 1917 and 1918, does it?

The Witness: There is also in there 1916, which I did not have time this morning to take out, and while it is physically in the book, I
38826 brought it along. Rather than delay to take it out, I have to take those sheets out.

The Master: Well, all of 1917 and the 1918 pay rolls are in that bound volume.

The Witness: Yes, sir.

Mr. O'Brien: I offer the pay rolls for the Utilization Department for 1917, and with them 1918.

The Witness: No, this is 1919.

Mr. O'Brien: Together, yes. For 1916, 1917 and 1918.

The Master: Well, is all of 1916 in there?

The Witness: I would have to look to be sure. I think so.

The Master: Well, you offer whatever is in that book, do you?

Mr. O'Brien: Under the same limitations as my previous offer, with respect to the first eight months of 1919.

Mr. Ransom: I object to the limitation.

The Master: I do not understand any limitation. These pay rolls are offered in evidence.

The Witness: This book bears date from January 29, 1916, it covers more than the period re- 38828
quired, and I brought the book complete this morning.

The Master: All right. Mark the book.

Book marked Defendants' Exhibit AA-448.

Mr. O'Brien: I renew the same questions I asked before, with regard to the identity of these persons, the character of their work, whether the witness handled the examination of the accounts of that particular department, and so on, the questions your Honor ruled out, and take an exception to your ruling.

The Master: Same rulings.

Mr. O'Brien: Exception. 38829

The Master: Now, what else have you got?

Mr. O'Brien: I guess that takes in everything.

Mr. Ransom: Everything except pressure charts.

Mr. O'Brien: Now, I ask counsel for complainant to produce the underlying data, being Item 7, bills, receipts, books, reports, expenditures of the Utilization Department.

Mr. Ransom: The request is vague, meaningless, general and indefinite, and involves a vicious quantity of data which the defendants' experts

38830

have examined over many months, and on the advice of counsel, the company has not produced anything except what has been indicated, under this subpoena. If specific vouchers or specific documents are desired and are concretely indicated, we will endeavor to produce them.

Mr. O'Brien: Therefore I think that it is specific, it is clear that we want all the original evidences of expenditures, the receipts, the papers that cover all of those matters, the books of original entry covering all of the expenditures of the Utilization Department. I cannot see why the

38831

company should be evasive on it, why it should not produce them.

The Master: I sustain the position taken by Judge Ransom, because for nearly ten months now, at any rate since May or June, 1919, you have had access to the company's books, records, underlying data, receipts vouchers and anything else that they have, and you ought to be able at this time to identify precisely what you want.

Mr. O'Brien: I have described the books sufficiently to require them to be brought here, so that such action might be taken with respect thereto as we see fit, as counsel for defendants.

38832

The Master: Now, you have got a ruling.

Mr. O'Brien: And I take an exception to your Honor's ruling. That means that we cannot have this underlying data?

The Master: It does not mean anything of the sort. It means that if you will send somebody up to the office of the Gas Company, who knows what you want, or go yourself to the office of the Gas Company and pick out the vouchers, receipts, papers and books that you want, they will be brought here.

Mr. O'Brien: But your Honor, I have specified

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all of the bills and everything that covers the matter of expenditures of this department.

The Master: I have made my ruling.

Mr. O'Brien: They know what we want.

Mr. Ransom: We could not tell.

Mr. O'Brien: And they are, all the way through this examination that you have referred to, this examination that has gone on for ten months, you say, but certainly not as to the defendant Edward Swann, all of these things, this access that you have spoken of has been camouflaged by the witness Davidson representing the company, they have been continually kept there 38834
waiting and waiting under this same old claim, that you must give us the number before we produce the paper, and state what you want it for.

The Master: Anything else?

Mr. O'Brien: I note my exception to your Honor's ruling.

The Master: Anything else?

Mr. O'Brien: That is all under this subpoena.

The Master: Now, call Dr. Bemis. You need not spend any time talking it over with Dr. Bemis now, because I just want him sworn, and then I am going to bring up the question of adjournment until eight o'clock, because I know you are going 38835
to take some time and I do not want to consume time after six o'clock.

Mr. O'Brien: I want to be frank to your Honor on that.

Mr. Ransom: These pressure charts will be kept here until he wants them.

38836 Edward W. Bemis, Direct.

EDWARD W. BEMIS, called as a witness on behalf of the defendants, being duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. O'BRIEN:

Q. Mr. Bemis, where do you reside?

A. Chicago.

Q. And what is your vocation?

A. Engineer and student of utility questions.

Q. Where were you born?

A. In Springfield, Massachusetts.

Mr. O'Brien: Is that enough, your Honor?

38837 The Master: Why, yes, we will suspend here. All of these gas records have got to be here tomorrow morning with your gas witnesses, because I won't touch them tonight.

Mr. Chambers: Well, first thing in the morning?

The Master: Yes, and I will put them on the first thing in the morning.

Mr. Chambers: You mean observed candle power?

The Master: It is now about a quarter to six, and as I am going to have a night session, I am going to take a longer adjournment than I did at lunch hour, and we will adjourn now until eight 38838 o'clock.

Mr. O'Brien: Now, in regard to that, your Honor, I want to protest against it. I want to say to you what I have said before. First, from a personal, purely a personal standpoint, for over three and a half to four weeks, I have had my five children laying sick, but one of them today is up. The care that they need and the attention which they have been given by our household force and my wife needs some co-operation on my part, and I have not been able to play even half a

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decent part, so far as time at home is concerned. The hours at which you have driven us, from 9:30 until 6 o'clock in the actual trial of the case, the quantity of record that has been consumed, the intensity of work that is involved in the presentation of the direct and later in the re-direct of the defendants' testimony, the engaging in such argument as has been entailed in the presentation of that testimony covering so many hours, have been severely taxing the hours that I have been—

The Master (interrupting): I haven't any doubt of those things. Go ahead.

38840

Mr. O'Brien: It does not mean much to the Gas Company.

The Master: Go ahead, I thought you were through.

Mr. O'Brien: The hours that I have been compelled to spend with witnesses into the late night of each of those days has simply meant very little time for sleep, and the result of it is, if it has not it will be, bound to show itself in the conduct of the case, so far as I represent a defendant. I want to say to your Honor it is simply superhuman, and while I trust that God will give me the strength to endure the trials of this case, it is pretty hard to guess where it is going to leave us. I am speaking to you just as frankly and candidly as I can, and I earnestly protest against it.

38841

Mr. Chambers: I want to say—

The Master: Your protest is noted, too. I want to say—I appreciate all that Mr. O'Brien has said, it has been a gruelling fight for everybody in this case, and it is an unfortunate thing that cases like this have got to be tried. I started off with half a day, I ran it at one time all day, and I went back to a half day, and I have

38842

found it absolutely necessary to go all day, and this case has got to see its finish. This is probably the only night this week that I will make you gentlemen work.

Mr. Chambers: Well, you make us work—it makes us work out of court.

The Master: Well, I have to also.

Mr. Chambers: And you hold us in court.

The Master: This case is ruinous to everybody in it, it is ruinous to me more perhaps than to anybody else, you gentlemen are public employees, your salary goes on just the same, you

38843 are not affected in any way.

Mr. Chambers: Well, you cannot be paid any salary to compensate for taking something out of your hide, you know.

The Master: I know that, but I have got to get rid of this case.

Mr. O'Brien: And your Honor, the situation—

The Master (interrupting): I appreciate the hardships of the situation.

Mr. O'Brien: You are embarrassing the case, you are jeopardizing the case, and I tell your Honor, it is a serious matter involved here, when you say we have to put in these hours and say I

38844 have got to proceed after the hours I have put in today. It is physically impossible to do it, and the time may arrive when it strikes the practical side of the conduct of the case. What I am suggesting to your Honor even spells expedition. The time that I will have tonight will not be for recreation for me, but I will have to take the time in the preparation of tomorrow's business.

The Master: No, Mr. Bemis' testimony is prepared.

Mr. O'Brien: Your Honor, the need of my giving time to this case is imperative, and I owe

38845

something to my home. Now, I have told you, I have given you the personal note, I do not usually fall back on some personal matters.

The Master: I appreciate those things.

Mr. O'Brien: But I have given you that, and I have given an excuse that any court in this country will honor.

The Master: I appreciate all that you say.

Mr. O'Brien: You can do as you want, but the responsibility will be with you.

The Master: I have got to insist on going on tonight, and I am going to make it as short as I feel consistent with the results that we get tonight. 38846
I have a long standing engagement for tomorrow night that I do not think I can break, at least I do not want to, but if we move along expeditiously tomorrow I shall probably not insist on working tomorrow night. I know I cannot on Friday night, so there is only one other possible night, and that is Thursday, and I won't insist on it if we can get expedition.

Mr. Chambers: Why do you feel you have to go on tonight?

The Master: Because this case has got to be finished.

Mr. Chambers: I want to note my vigorous protest to going on. 38847

The Master: We will adjourn until eight o'clock.

Recess until 8 P. M.

Night session.

EDWARD W. BEMIS resumed the stand:

DIRECT-EXAMINATION CONTINUED BY MR. O'BRIEN:

Mr. Ransom: If the Court please, when you declared the adjournment the witness had just characterized himself in the answer to the last question as an engineer. I move to strike that out as incompetent and not a proper method of proving what kind of an engineer he is, if at all.

The Master: Motion denied.

38849 Mr. Ransom: Exception.

Mr. O'Brien: Is that a conclusion of law?

Mr. Ransom: Not in this case.

The Master: Do not waste a couple of hours tonight getting into an argument with Judge Ransom.

Q. Doctor, where were you educated?

A. In Amherst College. I graduated in 1880, then I was at the Johns Hopkins University a little over three years doing post-graduate work in economics and history, getting my doctor's degree there in 1885.

Q. What degree, if any, did you get at Amherst?

A. A degree of A. B. and later of A. M.

38850 Q. After your course at Johns Hopkins, what work did you take up?

A. I spent sixteen years in teaching, and investigating and studying public utility questions.

By the Master:

Q. Let me interrupt you, Doctor. Teaching what?

A. Teaching economics and history.

Q. The way your answer was made you will notice it will read that you were teaching public utility corporations.

A. I see. I was teaching economics and history at Vanderbilt University, the University of Chicago, and

at Kansas State Agricultural College, and doing some investigation of municipal utilities during the same period.

The Master: That is better.

The Witness: And during that period I appeared before the City of Des Moines in a gas rate case, in the year 1891, which, so far as I know, was the first gas rate case in this country.

By Mr. O'Brien:

Q. Were you a witness in that case?

A. Before the City of Des Moines. From 1891—well, in 1890 when I was in Europe making investigations of technical education for the United States Department of Labor, I devoted a good deal of time to visiting gas works and electric light plants of England and Scotland. 38852

In 1891, in October, I became Superintendent of the Water Department of Cleveland, Ohio, and had entire charge of that department under Mayor Tom L. Johnson during all the rest of his administration, for a little over eight years, until the close of 1909. During that time I took charge of the universal metering of the City, setting over 70,000 water meters and extending the tunnel under Lake Erie for about an extra mile, putting up a new pumping station with one hundred million gallons a day capacity, and enlarging another, and making very large extensions of street mains and services, and reorganized the accounting department. 38853

During that period while I was in Cleveland I also assisted the City in the appraisal and adjustment of rates of the Cleveland street railways, which led to the famous franchise known sometimes as the three-cent franchise, but with the sliding scale affairs, now five cents there under that schedule. I also during that time assisted many cities in gas and electric light and

water cases. I assisted at Cedar Rapids and Saginaw, Michigan, Buffalo, Syracuse, Montreal, Boston, Haverhill and Springfield, Massachusetts, in cases before the commissions or courts; also I was in this Consolidated Gas case in 1906 during the entire continuance of the case. I assisted the City of Baltimore in the taxation of utilities there, particularly gas.

I believe there were some other cases, but those I remember as the most important. During that time the National Civic Federation made an extensive investigation of city and privately owned utilities here
38855 and in Great Britain. An Executive Committee was appointed of five members, of which I was one, to carry on that investigation and employ experts to conduct the work. Dr. Maltbie was another member and the president of the Boston Edison was a member. Then in that connection we visited these utilities very extensively here and in Great Britain, supervised the work of the engineers and accountants, and made a report finally.

By the Master:

Q. What did you say the purpose of that investigation was?

A. It was the investigation of the relative advan-
38856 tages and disadvantages—

Q. Oh, of public as against private ownership?

A. Of public and private ownership, and the lessons to be drawn from a study of the whole situation, the relative efficiency, accounting history, and so on.

In January, 1910, I came to New York as Deputy Commissioner of the Department of Water Supply, Gas & Electricity under Mayor Gaynor and remained here until sometime after he was shot. Then I left the department, that was in about October, 1910, and from that time have devoted myself exclusively to the investigation for cities and states and other public

bodies of the public utility questions, organizing a staff of engineers and accountants, or working with engineers and accountants, as the case might be, in appraisals and adjustments of rates.

I have had charge of the appraisal within the last five years of all the utilities in the District of Columbia, for the District Commission, a public body that also controls the government of the District, and I appraised nearly all the utilities of Dallas, Texas, for the city government there.

I also had charge of the investigation of the gas situation in Chicago in 1911, and since then have had 38858
charge of a complete appraisal of the gas companies of Chicago, just finished within a few months, and I am now representing the City of Chicago in the adjudication of our appraisal as compared with the appraisal of the private companies, of their engineers, before the Commission.

By Mr. O'Brien:

Q. Have you ever gone into the question of telephone rates or made appraisals of telephone companies and their properties?

A. I was employed by the City of Chicago in an important telephone case, and on my recommendation the rates were fixed, and agreed to by the company, 38859
which operated for several years prior to the close of the war.

I also was employed by the State of New York, through the Joint Committee of the House and Senate on Telephones, the chairman being Senator Foley at that time, about 1915, in the investigation of the telephone situation in New York City, and my conclusions were embodied in their report.

Mr. Ransom: Objected to as incompetent, and I move to strike out the statement. The report speaks for itself, if it is material.

The Master: I will let the statement stand as his conclusion that it is embodied in a report.

The Witness: It was printed by the State, and my suggestions on rates were the rates that were adopted in almost every respect.

Mr. Ransom: I move to strike out that statement of the witness.

The Master: I will let it stand as indicating that his judgment was accepted.

Mr. Ransom: His modest statement is not very competent proof of that.

38861 The Master: Well, the remark "his modest statement" gets you nowhere. The man who is under oath attempting to qualify as a witness must in the nature of things throw modesty aside; he cannot be modest and attempt to qualify as an expert.

Mr. Ransom: Exception.

The Witness: I have been employed by the Commission for the Second District of New York in the investigation of the Westchester Gas & Electric Company; employed by the City of Schenectady in a street railway case, by the State of Massachusetts in the Haverhill Gas case within the last five years, and also by the City of

38862 Boston a little earlier in a similar case; by a State Commission of Maryland in the Baltimore Consolidated Gas & Electric Light Case.

I am a member and have been since 1914 of the Advisory Board of the Interstate Commerce Commission in the Valuation of the Railroads and Telegraph and Long Distance Telephone Lines of the United States, having to advise with regard to methods of valuation and general policies to be pursued in the matter. This work called me to Washington a great deal for the first two or three years of that service.

I have appraised the Water Department of Akron, Ohio, and the City subsequently purchased the water works on the basis of my appraisal, the company consenting to it. I have been employed several times by the City of Des Moines, beginning with a gas case back in 1891 that I spoke of, but more immediately referring to the gas case in 1912, or 1911 and 1912, and again lately in a street railway case; have been employed in two water cases there, the last one last year, and my recommendations on purchase price being accepted by the City and company, and the water 38864
works having lately been taken over at that price by the City; and I am now engaged to help the City in another impending gas case there.

I had charge of the appraisal of the Gas Works of St. Paul, Minnesota, and the rates that I suggested were those accepted by the company. I also had charge of the adjustment of the rates and ordinance that went into effect on gas in Minneapolis about five years ago. I was a member of the Board of Engineers, Chicago Traction, as representative of the City of Chicago, for a year and a half. I have been in almost continuous service in one shape or another for the City 38865
for the last ten years—or the last eight years, rather—sometimes in telephone matters, sometimes in street railway matters, very largely in gas, and am now in the employ of the City of Chicago, as I have already suggested, in the completion of the gas work.

I am now engaged and have just completed the appraisal of the Street Railways of Erie and have testified before the Pennsylvania Commission and have nearly completed the appraisal of the Pennsylvania Natural Gas Company for

Erie, Corry and Warren, Pennsylvania, and am still to testify on that before the Pennsylvania Commission.

I have represented Pittsburgh in a telephone case within the last year. I have appraised the Street Railways at Peoria and represented that city in the adjustment of rates and also of the water rates there within the last two years.

There are doubtless many other cases, but I think perhaps they sufficiently enumerate them, or they are sufficiently enumerated in those I have

38867 given.

My work, I might add, was not that of ever having built or operated gas works, for I never have, but from long study of the problems involved and from my practical experience in direct charge of the Water Department of Cleveland for over eight years—all of that gave me a familiarity with the situation, and joined to that my special studies in engineering, without getting a degree or studying at a university for that purpose, but from a long study of those subjects I have devoted myself to it as a life work, these public utility matters.

38868 Q. In these various rate-making proceedings, either before Public Service Commissions or courts, have you been generally accepted as an expert upon the subjects as to which you testified?

Mr. Ransom: Objected to as incompetent.

The Master. I will allow it.

Mr. Ransom: Exception.

A. My testimony has never been refused.

Q. You made an investigation of the complainant company at the time of the trial of the first action?

A. Yes.

Q. You at that time made an investigation of their books of account, manufacturing results, the inventories of their properties and many other matters in connection with that litigation?

A. Yes.

Q. Have your work and your studies and investigations brought you in contact with any other gas companies in the City of New York?

A. So far as they are bound up with the Consolidated I have studied the returns to the Commission for many years. I have not been in any gas case involving any other companies in the City of 38870
New York. I was in the Westchester Gas & Electric, as I have already testified.

Q. Didn't you make some tentative or preliminary investigation into the Bronx Gas & Electric Company?

A. I did, and also into some other gas companies, but I thought you were referring to any extended case in which I might have testified, or something of that kind.

Q. In the State of New Jersey have you, outside the proceedings that you have mentioned, done any work in connection with public utilities?

A. I have been employed by the Cities of Paterson and Passaic in a water case; also in a gas case. 38871
I have lately been employed by the City of Newark and other cities joining with them, in all Northern New Jersey, in a street railway case, all of these before the New Jersey Commission except the water case. I forgot to mention, too, that I have been employed by the City of Springfield, Illinois, in several cases, gas and street railway.

Q. Detroit, have you done any work there?

A. Yes, I made the first appraisal of franchises that I think was ever made, being made for the City

of Detroit in 1899, my results being accepted both by the city and the company. Then I was employed and had charge of the appraisal of the street railways of Detroit for the Detroit Street Railway Commission three years ago, a commission composed of Mr. Cousins, now Mayor, and Mr. Dodge, of the Dodge Motor Company, and another gentleman who is prominent in the City of Detroit.

Q. These various investigations and studies and experiences, Doctor, have taken you into fiscal statements, records of operations, books of account, fiscal

38873 reports, underlying data, have they?

A. Yes.

Mr. Ransom: Objected to as vague and incompetent in form. What does he mean?

The Master: I will allow the question, calling counsel's attention, however, to the fact that if Mr. Bemis is to testify to any conclusions based upon the matters to which you have just referred it will have to be more particularized.

Q. You spoke, Doctor, of your connection with the Water Department of the City of Cleveland and its Commercial Department. Will you explain to what extent your work went?

38874 A. It went into the whole question of the accounting system, which was changed under my supervision, the fixing of rates for metered service—for everything had been on the flat rate basis previously; into the contracts for the purchase of water meters and the determination and methods of setting them, which was somewhat new and somewhat different from elsewhere. Also a very large development of the street mains and services, and what I have already referred to in the line of pumping station and tunnel. Also we decided on the importance of increasing the pressure, and to that end selected a site for a reservoir

and bought it. The arrangements were started for the construction, which has since been finished, of that reservoir. I was in close touch with every department of it for eight years and a half.

Q. Have you made a study of the methods of accountancy and have you examined the accounts of most or many or any of the public utilities to which you have referred?

A. I have examined their accounts. I have not a certificate of accountancy, but I have examined the accounts of these companies very extensively and have directed the work of accountants a great deal in securing certain analyses that I needed, and supervised their work in directing them as to what I needed and what I wanted. 38876

Q. Have you made examinations of accounts yourself?

A. Yes.

Q. To what extent has your experience gone in the matter of engineering work itself?

A. I had to design methods of extension of our system of distribution in Cleveland very extensively, in devising new methods for the metering of the city, for example, which was perhaps the most novel feature of the work, because at that time metering was not very extensively carried on and Cleveland was the first very large city to go into the work in that wholesale way. We reduced the consumption of water about 50 per cent per capita by stopping the waste. That involved all manner of methods, not only metering but methods of pitometer surveys, investigations of loss of water at night by leakage, and wastes inside the services and buildings. 38877

Q. Do you mean to convey the idea that you have personally done drafting and engineering work?

A. I have not done very much drafting, though I have had a great many draftsmen preparing plans for me; but I have been out with the men in the gangs. I have directed their work—actual work. I have worked on plans for improving the methods of work.

Q. In connection with our City Department of Water Supply, Gas and Electricity you were a Deputy Commissioner?

A. Yes.

Q. During the time of your incumbency what was the character of your especial work?

38879 A. The starting of investigations for checking the waste of water, the setting of meters, surveys of all kinds of the distribution system, and the study of the pressure at different parts of the City and how to improve it.

Q. Have you made a study of the methods of account approved by the various public utility commissions?

A. Yes.

Q. If so, where and what states and what commissions?

A. I have carefully followed the work of the Interstate Commerce Commission and its classification
38880 of accounts for various utilities, and the New York Commission for the First and Second Districts, the Wisconsin Commission, and before that the somewhat primitive but early classifications of the Massachusetts Commission, of the Gas and Electric Light Commission, and have had occasion to follow all the state commissions from California to New Hampshire, all of whom are carefully classifying accounts and more or less publishing extended and detailed reports which I follow. Illinois, for example, I have had occasion to study the accounts there a great deal. I have been in many cases before the Illinois Commission, which

I did not think to mention, representing various cities.

Q. Have you testified on matters that involved accounts before these commissions?

A. Yes.

Q. If we take up the time to ask you a number of questions, would you be able to explain the various systems of accounts approved by the various public utility commissions of the country to which you have referred?

Mr. Ransom: Objected to as incompetent

The Master: I will allow it. I assume from 38882
the question that the systems vary in the various states.

Mr. Ransom: Exception.

A. They do not vary now very largely. They have come to be very closely in harmony. They have their annual conventions, the accountants do and they recognize the importance of practical uniformity, so that the differences are not large today as between the systems of accounts of the various state and city and national governments.

Q. Are you acquainted with the methods of accounts generally used by gas companies in this country? 38883

A. Yes.

Q. The systems which they follow in the setting up of their books?

A. Yes.

Q. And the co-ordination of accounts in their systems of accountancy?

A. Yes.

Q. And in the various instances where you have referred to gas companies, would you say that you are acquainted intimately with the methods of accounts of the gas companies referred to?

A. Yes.

38884 Edward W. Bemis, Direct.

Q. Have you made a study and have you had occasion to examine into reports made by gas companies to the Public Service Commission of the State of New York for the First District?

A. Yes.

Q. How frequently?

A. Very frequently from the start of the Commission which grew out of the old Consolidated gas case. So I followed them very closely to see the working of that law, the eighty-cent gas act, and to learn what the experience of New York was as bear-
38885 ing upon problems elsewhere.

Q. And have you examined the reports made by the complainant company or any of its affiliated companies to the Public Service Commission, to any extent?

A. Yes, I have been through many of their typewritten and penned reports to the Commission here in New York, and also other companies' reports upstate to the Second District in previous years.

Q. Has your testimony in any of these proceedings to which you have referred, involving either gas or other public utility, included testimony on accounts or which involved accountancy?

38886 A. This testimony has done all that. Not in the purely technical sense, but in the drawing of broader financial and accounting conclusions.

Mr. O'Brien: Your witness.

The Master: Go right ahead.

Mr. O'Brien: I thought he might want to examine him.

The Master: I won't allow it.

Mr. O'Brien: Mr. Davidson, will you produce Voucher 6567?

The Master: What year is that?

Mr. O'Brien: That is 1920, your Honor.

The Master: 1920?

Mr. O'Brien: Yes, paid "1-14-20."

Q. Doctor, have you for the purposes of testifying in this case prepared a schedule or a tabulation setting forth the various items with respect to the Astoria tunnel, the Ravenswood tunnel?

A. I have.

The Master: Before you proceed any further, do you want to use this voucher?

Mr. O'Brien: Yes, your Honor.

The Master: Pass it over.

Mr. Ransom: I note that what Mr. Davidson has produced under the subpoena, of the Astoria Light, Heat & Power Company, is not the original invoice, but a certified copy, it appearing that the original was attached to the Astoria Light, Heat & Power Company's invoice rendered to the Consolidated Gas Company of New York for gas supplied to that company during the month of December, 1919, and hence a part of the gas transferred vouchers which have been previously referred to (handing to Mr. O'Brien). 38888

The Master: While you are looking at that, Mr. O'Brien, I want you to have in mind what I indicated to you this afternoon in support of your contention, that I thought the proof in this case ought to be limited, perhaps, to the end of August, 1919. 38880

Mr. Ransom: The complainant does not think so.

The Master: I know the complainant does not think so.

Mr. O'Brien: It is taken as a type. I will tell you, your Honor, the voucher is simply taken as a type showing divisions of expenses of the

Astoria tunnel and the East River tunnel. I suppose we could take some other voucher as illustrating what we have in mind. Of course I would have to defer that until tomorrow, setting up the figures—the witness would—based upon a voucher of some other time.

The Master: Has he figured on this voucher?

Mr. O'Brien: There are conclusions drawn from it; but as to distribution, that was wanted, that voucher, in order to justify the assumed distribution of the expenses of that tunnel, and
38801 a particular voucher was taken without respect to dates.

The Master: In other words, the date will not make any difference?

Mr. O'Brien: I take it it will not. Will it, Doctor?

The Witness: It will only make one difference. The rental is the same, but the proportion paid of it by the Consolidated was a little larger in 1918 than in 1919. But the lessons and conclusions that I draw are the same—not affected by the date.

The Master: Go ahead, Mr. O'Brien.

38802 Mr. O'Brien: I would rather keep out of the territory that has not been covered by the proof in this case.

The Master: That is why I mention it to you. I think it would be a very unwise thing to open up a situation after the end of August, 1919.

Mr. Ransom: The defendants have been working on these 1919 and 1920 vouchers.

Mr. Chambers: Did not the Court say we would be foolish if we did not?

The Master: That may be.

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Mr. O'Brien: I may say the taking of this particular voucher as against the voucher of 1918 favors the company for the reason that the larger amount was paid at that time by the complainant company. But the conclusions are as to the manner of the distribution of the fund and without respect to the particular moneys or the particular amounts.

The Master: As I understand it, this voucher sets up the distribution in the form that it took in 1919; is that right?

Mr. O'Brien: Yes, the voucher is marked "Paid, January 14, 1920," but refers to the 38804
months in 1919, and I think it would be better perhaps to keep out of the—

The Master: Did Dr. Bemis base any figures on the 1919 situation at all?

Mr. O'Brien: He has set up these figures and shown the proportions that are charged up to or paid by the Astoria Company. This relates to the Astoria Company entirely.

The Master: Let us get this clear; we may be able to save a lot of time. As I understand it the voucher which you have called for is a voucher which shows the basis of the charges for the months of 1919? 38805

Mr. O'Brien: For a particular month in 1919.

The Master: It would be the same for every month, I take it, would it?

Mr. O'Brien: I take it it would.

The Master: Is that right, Mr. Ransom?

Mr. Ransom: That amount fixed by this month's report applies to the whole year.

The Master: That is what I understood Mr. Carter to say before we adjourned. If that is so, there is no reason why you cannot take the figures set out on that voucher as of some other

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month in 1919, if your testimony is ready for it.

Mr. O'Brien: I think that can be done, your Honor.

The Master: Then go ahead.

Mr. O'Brien: It is offered with the assumption that this is the same as any other month, and the purpose of the offer of the testimony is to show the manner of the distribution and the relative proportion of the expense of that tunnel that is borne by the Astoria Company.

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The Master: If you offer that voucher in evidence I will take it and limit it strictly to the offer that is made, and for the purpose for which it is made, and I will expressly state upon the record that it is not intended to prove the fact that the items were charged for December, but on the theory that you are taking, for instance, August, using a December voucher simply to show the August figures.

Mr. O'Brien: Yes.

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Mr. Ransom: Of course, the complainant does not assent to that limitation of proof. We believe we are in a court of equity and that, without attempting to quote the Latin as Mr. O'Brien would do, equity speaks as of the time of the judgment, we are entitled to have before this Court and any Court to which this decision might come for review would expect your Honor to have before you proof of the condition, not as of August, 1919, but as of January and February of 1920.

The Master: I am going to answer what you have said very simply. The rule that you have quoted I think is correctly quoted; it gets down to a very practical situation and one that I will dispose of when the defendants' case is in. You

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will then proceed, I take it, to offer proof beginning September 1st to the end of the year?

Mr. Ransom: I take it we will first offer rebuttal. We have gone already to the 31st of October.

The Master: Yes.

Mr. Ransom: And your Honor has commented I think quite unwarrantedly upon proof covering twelve months ending October 31st, which we think just as accurately reflect the conditions over twelve months' operations as though they were for a calendar year.

The Master: Or a fiscal year.

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Mr. Ransom: Or a fiscal year.

The Master: And it is neither. That is not the point, here is the point. You will proceed with your rebuttal, then you will proceed to offer the proof to complete the year 1919. I will then be met with this very practical situation. If I close the proof without taking it I will have taken into the record substantially the year, I will have taken all of 1918, the value of the property used in the gas making business will not have changed in those two months; no evidence will be in the record that there has been any change or could have been any change in

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the last two months of the year, a fact I shall go very far in indicating—that it will be a good many months, if not years, before the cost of production, distribution, salary and material expense changes.

Mr. Ransom: But they have changed; there have been very substantial increases.

The Master: Unless they go up.

Mr. Ransom: They have gone up very rapidly.

The Master: I know that. It is going to get down to this: If you insist on opening up this

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case for the completion of the year 1919 and you finally induce me to do it on the theory that your case is not complete unless you do, this case is going to take three or four months more, and I can see it.

Mr. Ransom: I do not see how it could possibly.

The Master: Well, it will for one reason alone, if not for others, and that is that as soon as this case is finished as it stands now, without opening up a new line for the completion of 1919, I am going away and I am going away for three

38903 weeks at least. I have been pressing this case as hard as I knew how, over the protest of Mr. O'Brien and his associates, because I felt it was my duty to press the case to a completion, to the end that a report be made which would dispose of it as quickly as possible and, if the report be favorable to you, so that your company may have the advantage of it. But I will not continue it beyond the completion of the case as I have it. I cannot do it. I have not any doubt that Mr. O'Brien and the rest of counsel, including yourself, are practically worn out, as I am. I have sacrificed practically every other in-

38904 terest to finish this job, as I have taken it to be my job, but I will not continue this pressure and the way I have been running if you insist upon going on. That is all there is to it. Go on, Mr. O'Brien, we will dispose of it when the time comes.

Mr. O'Brien: I suppose in view of the objection that was made by counsel—

Mr. Ransom: Counsel had made no objection —counsel for the complainant at least.

Mr. O'Brien: Yes.

The Master: No.

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Mr. Ransom: I object to the Court's indication of his intention.

The Master: No, he did not object to that paper. I called your attention to the fact that I knew what you wanted and have tried to make the record clear for you, that I will let you spread on the record the distribution in the year 1919 and I will permit you to give the stenographer as the basis for spreading in the record the distribution used during 1919 this paper that you have called for.

Mr. Ransom: It was offered in evidence.

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Mr. O'Brien: Your Honor, if there is going to be a technical objection made that this does refer to the month of December and not to a month prior to August 31, 1919, I would prefer to have the figures set up from a particular voucher of one of those earlier months.

The Master: Perhaps Judge Ransom will stipulate that you can take the figures off that.

Mr. O'Brien: I take it the repairs will be quite uniform throughout the year, all those items repairs, interest on taxes, interest on investment —I assume those run evenly through the months of the year, they do not disturb the conclusions or deductions that are drawn by the witness.

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The Master: Use your own discretion about it I am not going to press you one way or the other.

Mr. Ransom: Counsel has made no technical or other objection.

Mr. O'Brien: I will pass over that for the time being.

The Master: Then pass that back to Mr. Davidson.

Mr. O'Brien (to the witness): You can make the request, Doctor, of Mr. Davidson tomorrow

to turn over to you the voucher of some month during 1918.

The Master: I will make that direction now.

Mr. Ransom: I want to say in order that counsel may not be under any misapprehension, if anybody is going to try to do what I judge Prof. Bemis has planned to do, he will have to use this voucher for 1919, because he won't find any such detail and division on August vouchers.

The Master: Mr. Davidson, will you bring here in the morning the vouchers for the first
38909 six months of 1919. Bring in all the vouchers.

Mr. O'Brien: Bring in the voucher, Mr. Davidson, for the month of December of 1918.

The Master: Is that the one you want?

Mr. O'Brien: I take it it will set up the division similarly to this.

The Master: Then bring in the one for December, 1918, instead of December, 1919.

Q. Dr. Bemis, in your experience—

A. Permit me to interrupt. Before we leave the voucher question, may I suggest another voucher?

Q. Yes, do that.

A. I have used here a voucher 6541 also, similarly
38910 of the same date but applying to the rental paid to the Astoria by the Standard Gas Light Company for December, 1919. I would like to see that.

The Master: What Dr. Bemis has done, he has used the December, 1919, vouchers of the Astoria Light, Heat & Power Company to the East River Gas Company and the Astoria Light, Heat & Power Company to the Standard Gas Light Company. You want the December, 1918, vouchers, instead of the December, 1919, vouchers?

The Witness: Yes.

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The Master: Substitute December, 1918, for December, 1919, on both those vouchers.

Mr. Ransom: I want to say for the information of counsel that I doubt whether you will find the detail that Dr. Bemis is relying on.

The Master: On the December, 1918, vouchers?

Mr. Ransom: Yes, sir.

The Master: Are they not the same as 1919?

Mr. Ransom: I do not think the form is the same. That is, a new basis was set up in 1919, as has been testified.

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Mr. O'Brien: I will determine before then, if that be the case—

Mr. Ransom: The vouchers will be here in the morning.

The Master: I do not see, Mr. O'Brien, where you are taking any chances, because the opening up of the case for the balance of 1919 will go very largely upon Judge Ransom's insistence on it in the light of what I have told him. In other words, so you can understand what is in my mind, I think the rule is that this case being in equity I must take the proof to as late a date as possible, and I said what I did to intimate and to indicate to Judge Ransom the danger he is running into so far as time is concerned. But if he persists in it, I probably will say very well, I am not concerned about it if it takes another year. You can have that in mind in reaching a conclusion as to what you want to do.

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Mr. Ransom: I shall not make objections, technical or otherwise, to the receipt of these vouchers, nor shall I make an objection based on the ground or the fact that the proof so far in the case has not covered it to the end of December.

The Master: Will you go one step further, Judge Ransom? Judge Ransom has said, Mr. O'Brien, he would not interpose any objection on the ground it is not within the period covered by him. I am asking him whether he will make one more stipulation, and that is in proof he offers for November and December he won't insist it is rebuttal because you offered this in evidence?

Mr. Ransom: I regard my right to offer proof to the end of 1919 and as to the present con-
38915 ditions, as your Honor has indicated, as a matter of absolute right, coupled with my duty to my client of weighing the practical factors to which your Honor has directed attention I shall not urge the offering of these portions of the Astoria bill to the Consolidated as a ground on which your Honor is bound to take testimony covering the remainder of 1919.

The Master: All right, let us proceed, Mr. O'Brien. You use your judgment as to what you want to do. Mr. Davidson will have these vouchers here in the morning again if you want to postpone it, and we will have the 1918, too.

38916 Q. Mr. Bemis, have you in connection with the various—

The Master: I want to interrupt you once more. If you have any tabulations, calculated tables, that you are going to prove by Dr. Bemis, you will have in mind that I am going to give the other side a chance to analyze those tables before cross-examination.

Mr. O'Brien: Why, I do not think they want to go very far with that. The tables on this subject are very simple. You are speaking about the matter we have before us?

The Master: Any tables you want to put in by Dr. Bemis, if you can possibly get them in tonight, I think it would be useful.

Mr. O'Brien: I am speaking about that. I may state briefly, your Honor, that in regard to the deductions made from the analysis made of that particular voucher, that it goes simply to the rental paid by the Astoria Company for the use of a tunnel which was built with money that that company loaned at six per cent.

The Master: Go ahead.

Mr. O'Brien: I think I will take it up in the 38918
morning. I will say that the other tables are quite simple. Mr. Ransom might care to have a lot of time to look into them, or he might not. I think I could, if Mr. Carter was submitted on the same subject, I could handle it without any interim, as I did when Mr. Carter took the stand on the question of working capital, and I suppose that will be touched upon by Dr. Bemis.

The Master: Well, let us see what you have got.

Q. Doctor, have you in your experience, or in your various experiences that you have referred to tonight, made a study of the amount of funds that were necessary to various kinds of public utilities, and especially gas companies, with a view to carrying out their business, such funds being known under the term generally as working capital? 38919

A. Yes.

Q. And would you state, or could you approximate the number of companies where you have made studies of that kind, and then again the number of instances where you have given testimony as to what in your opinion would be a reasonable amount of working capital for a given gas company under given conditions?

Mr. Ransom: I object to that question on the ground that it embodies two questions, and ought to be separated.

The Master: Well, press your objection to both.

Mr. Ransom: I object, I think both are incompetent and immaterial.

The Master: Objection overruled, I will let Dr. Bemis say what studies he has made, and what cases he has testified in, and what he knows about it.

38921 A. I have testified on working capital in almost I think every case which I have referred to in reference to my qualifications, and have made investigations in many other cases, some of which I testified in and did not happen to mention in my opening statement. It is a subject that always comes up in my investigation of every rate case.

Q. And have you made a study as to the accounts of the Astoria Light, Heat & Power Company, with a view to testifying in this case as to what in your opinion is a fair and reasonable and adequate working capital for that company?

A. Yes.

38922 Q. As of December 31, 1918?

A. Yes.

Q. And you have prepared a statement that embodies the testimony which you would give in extended fashion if you were asked questions about the details thereof?

A. I have.

Q. And have you before you such a table?

A. I have.

The Master: How do we get into working capital for Astoria.

Mr. O'Brien: Why, we get into it in this way, your Honor, that it is part of the expense of the gas that is sold by the Astoria Light, Heat & Power Company to the Consolidated.

The Master: Oh, the price paid, you mean, includes working capital items?

Mr. O'Brien: Yes. And if you made a finding that that working capital as set up by the company is entirely unreasonable, you would make a proportionate deduction in the reasonable cost for making gas at Astoria. I will ask that this table be marked for identification. 38924

The Master: No, don't bother marking such things for identification. If you have something to offer in evidence, let us have it, otherwise don't bother marking it.

Q. Is this analysis correct?

Mr. Ransom: I object to it as incompetent.

A. Yes.

Q. And you would—

Mr. Ransom: Don't answer it.

Q. And you would testify as I have indicated as to the whole paper, you would so testify as to each item in it, in an extended examination on that subject?

A. Yes. 38925

The Master: Let me ask you, before I rule on this, I see you say total gross working capital $2,862,638.43, see that item?

The Witness: It should be $1,000,000.

The Master: What?

The Witness: It should be $1,000,000.

The Master: No, it should not, that is correct, $2,000,000.

The Witness: No, excuse me.

The Master: Why, yes.

The Witness: It is the last two items only that are added.

The Master: Oh.

The Witness: It should be 1,000,000.

The Master: Well, then, that explains the other question I was going to ask you.

Mr. Ransom: What is the error so far confessed?

The Master: This is what he does here. I was going to ask what this one and three-quarter meant here, average. He adds these two items
38927 together here, making it $1,862,000, from which $866,000 is deducted. You see, I noticed this, and I was wondering whether that was an error there, then I noticed this, too. What do you mean by average for this one and three-quarter months?

The Witness: That item, I assumed that they needed cash sufficient to pay their labor, salaries and wages, for a month and three-quarters before other money comes in, assuming a company beginning the 1st of January and collections began in February.

38928 The Master: I see how you did that. You have got your total yearly labor expense, and then you took a month of that, and then you took one and three-quarter months based on that $73,000?

The Witness: Yes.

The Master: Then you add that to materials and supplies?

The Witness: Yes.

The Master: Which makes $1,632,638.43, then you say "Less accounts payable other than to associated companies."

The Witness: In other words, the accounts payable for coal, oil and other materials, that is accounts on which they are paying no interest.

The Master: Well, all right, I understand it.

Mr. Ransom: I want to state my objection.

The Master: Yes, state your objection.

Mr. Ransom: You have offered it, haven't you?

Mr. O'Brien: Yes.

Mr. Ransom: I object to this as incompetent, 38930
immaterial and irrelevant, in the first place the qualifications of the witness to speculate or express an opinion on the working capital of this company do not in any way appear, the witness has not qualifications to do any such thing, it appears from his own statement of what he has been doing that he has been engaged merely in the collection of information, that he never has managed, built, or operated or had anything to do with a gas company or with any other private industrial enterprise, that he has had no experience which enables him to judge or give opinion as to the amount of money which is required 38931
as a part of the working capital of a great public enterprise such as this; that the mere fact that in a great number of cases he has been retained by those who were opposing increases in rates, or seeking reductions in rates, and that he has gained certain statistical information, does not qualify him, because as the Master said in the Des Moines case, to which the witness referred, "There is a great deal of difference"—in a comment upon the testimony proffered by this wit-

38932

ness. "There is a great deal of difference between collecting the information gained by investigation and from statistics and that gained by actual experience in the business," so that the witness is not a qualified expert upon values, as was held by the Master in that case. Furthermore, that this kind of a computation with respect to Astoria working capital does not bear upon any issue in this case, the statute here under attack relates both to gas manufactured and to gas furnished, gas purchased, and the offering of speculative and opinion testimony as to working capital, or proper working capital of the Astoria Company, is not probative, competent, material or relevant upon the question of whether this company should be required to sell gas at 80 cents.

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Furthermore upon the ground that this testimony is offered in impeachment of the testimony of the witness Sangster, whose statement is referred to in great detail upon this exhibit, who testified that the working capital of the Astoria Company, according to his computation, should be 15 cents per thousand cubic feet of sales, which means a figure of $1,462,500 as for the working capital of the Astoria Company.

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The Master: The objections are overruled.

Mr. Ransom: Well, then, the further ground that this is made up in its face on an entirely unsound basis, both in law and in fact; the witness undertakes to determine adversely to various courts the rule to be applied in computing working capital, and to that extent is undertaking to perform the functions of the judicial tribunal itself, which, under the testimony of Prof. Mathie it is a matter which should be and is de-

termined by the judicial tribunal in the first instance.

The Master: The objections will be overruled Where is the original of this exhibit?

Mr. Ransom: Exception.

Table marked Defendants' Exhibit AA-449

Q. Have you likewise made a study of the Consolidated Gas Company with a view to forming your opinion as to what would be a fair and reasonable and adequate working capital of that company as of December, 1918?

A. Yes. 38936

Q. And you have set that forth on a statement?

A. Yes.

Q. The statement is in your opinion fair, sets forth a fair and reasonable and adequate working capital for the Consolidated Company?

A. It does.

Q. And you would, if questioned in detail as to the several items upon this statement, testify that the figures are correct, according to your determination of the working capital?

A. I would.

Q. And what is the net working capital as estimated by you as of that period? 38937

Mr. Ransom: I object to it as incompetent, the witness lacking in qualifications, working capital not to be determined in any such way.

The Master: Objection overruled

Mr. Ransom: Exception.

A. $792,666.26.

Mr. O'Brien: I offer this paper in evidence

Mr. Ransom: I object to it on the various grounds previously indicated with respect to the qualifications of this witness and the competency

38932 Edward W. Bemis, Direct

of the offering of this kind of testimony. Are there corrections also being made in this one?

The Witness: No, sir, there is one figure that is so obscure, I am making it heavier. The blueprint is not very clear.

The Master: Give the original to the stenographer to be marked. Objection overruled.

Mr. Ransom: Exception.

Table marked Defendants' Exhibit AA-450.

Mr. O'Brien: I shall have tomorrow morning, your Honor, a couple of more tables. They
38939 are not calculated to involve a great deal of inspection on the part of the complainant, and until that time I will proceed with some other testimony.

Q. Doctor, have you in the various gas companies that you have been connected with, examined, investigated, testified about and made a study of, have you made a special study and investigation of the quantity of leakage of gas in the conduct of the gas industry?

A. Yes.

Mr. Ransom: Objected to.

The Master: Objection overruled.

Q. And the same for leakage or other unaccounted
38940 for gas?

A. Yes.

Q. And you have made this study of leakage and unaccounted for gas conditions in various sections with varying conditions?

A. I have.

Q. Various sections of the country?

A. Yes.

Q. Have you locally gone into the question of leakage and the loss of gas by leakage or by unaccounted for sources?

Mr. Ransom: I object to the question as vague and indefinite. If the question is meant to relate to statistical studies, it is one thing, and if it is meant to relate to a sort of engineering study, going back of the statistics, the witness certainly is not qualified.

The Master: I will overrule the objection.

Mr. Ransom: Exception.

A. Yes.

Q. Have you made a study of the reported amounts of unaccounted for gas of various companies in the City of New York? 38942

A. Yes.

Q. And have you examined into this subject so far as the complainant company is concerned?

A. Yes.

Q. You were present during most of the trial of the original case?

A. Yes.

Q. And you are acquainted with the details of the testimony in that case?

Mr. Ransom: Objected to as immaterial.

The Master: Overruled.

A. Yes.

Q. You have followed closely the testimony in this case and been present many days in the trial of it? 38943

A. I have.

Q. You have seen the reports of this company to the Public Service Commission covering number of years?

A. I have.

Q. And the reports of other companies to the Public Service Commission which are located in the City of New York?

A. I have.

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Q. Considering the conditions under which the c no plaintiff company during the year 1918 and the firs eight months of 1919 was carrying on its business distributing its gas, what would you consider to be a fair and reasonable percentage to be allowed to th company for leakage or unaccounted for gas?

Mr. Ransom: Objected to as incompetent This witness has not shown qualifications at the present time.

The Master: I think I will sustain that objection. I do not think that Dr. Bemis is qualified

38045 to give opinion evidence on that subject-matter.

Mr. O'Brien: Well, your Honor, I want to say that subject of—if the objection be based upon the assertion that the witness is not a graduate engineer, a graduate of a polytechnic institute, a holder of a degree of Bachelor of Science or civil engineering or mechanical engineering, that it has found no force in the courts, and no later or no earlier than in June of 1919, the Supreme Court of the United States passed over and paid no attention to similar objections made to the qualifications of Mr. Alten D. Adams on the whole of his testimony put in in the Lincoln Gas Com-

38046 pany case. There was a strong objection made to the whole of his testimony in connection with that company, that because he had not to any great extent laid mains, because he never ran a gas plant, because he never erected a gas plant or its equipment, he was not qualified to testify. The authorities were cited at that time to the Court, and his testimony was received and objection was made to it by the representatives of the gas company and they, judging from the opinion of the Court, found no lodgment in the good

reason and conviction and judgment of the Court. This has come up with respect to men in other professions. A man, as you well know yourself, in the medical profession, need not be one who has his shingle out, and who is operating every day, experimenting with the cadaver, or using the scalpel on the live piece of humanity to qualify him to give testimony.

The Master: The trouble is that I do not think Dr. Bemis is qualified.

Mr. O'Brien: Well, I have addressed myself to that assumption of the objection. It may be 38948
that the objection was designed to go further I may ask the witness a few more questions, which would perhaps meet what is in your Honor's mind.

Q. Dr. Bemis, how long were you a deputy water commissioner for the City of New York?

Mr. Ransom: Objected to, fully covered.

The Master: Objection sustained. No, here is the situation. There is no use wasting time. The question of unaccounted for gas relates so peculiarly to the actual physical operation of the mains and services that no man, in my judgment, who has not had to deal directly with that 38949
kind of a situation, can possibly form an opinion that will be of value, it cannot be done in my judgment from any inferences to be drawn from the facts, any more than I can.

Mr. O'Brien: Well, right there, your Honor, wouldn't you consider that to a degree, if you sat as Master, say, in the Brooklyn Union Gas Company case, and in the East River Gas Company case and the other group of cases now pending in the Federal Court, and you had given the intensive study to these matters that would be

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entailed in hearing the testimony and passing on it, don't you think that to a limited degree you yourself would have an opinion that would be worth something on the question as to what the reasonable amount of leakage or unaccounted for is?

The Master: No, I do not think so.

Mr. O'Brien: Not to be discursive, but let me put that again.

The Master: To illustrate what is in my mind, the same point was raised by Judge Ransom as to the qualifications of Dr. Maltbie a little more
38951 strongly than Dr. Bemis about working capital. His theory seemed to be that Dr. Maltbie's qualifications depended entirely upon the information which he got as a judicial officer or a semi-judicial officer. I ruled in Dr. Maltbie's opinion, and I have taken Dr. Bemis's opinion on working capital, because, in my judgment it related very largely to accounting, rather than to inferences to be drawn from facts in other cases and the rest of it. I think men like Dr. Bemis and Dr. Maltbie who have delved into the intricacies of the financial problems of these companies, studying it from every angle, looking at it from the stand-
38952 point of accountants, can give an opinion from the experience they have had as to what that kind of an enterprise would need, in the light of all the factors that they have, for working capital, but when you come to this question of pressure, atmospheric conditions, places where mains are, the kind of joints that there are, the meters, the character of the buildings, it is so peculiarly a matter that has to do with operation that I won't take the opinion of any man who has not actually operated the distribution of gas in the City of New York.

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Mr. O'Brien: Well, now, let me just call two or three things to your attention. Supposing that in this country, and this will bring out what I have in my mind when I say that you yourself could after a certain experience with investigations of this kind, to a degree, have an opinion worthy of some consideration as to what was a reasonable amount of leakage. For instance, assume a company comes forward in New York City, and in the litigation in which is to be determined the reasonable cost of making gas, they set forth that their leakage and unaccounted for was 25 per cent, that they were going to ask the 38954
consumers to assent to the proposition that they could not help losing it.

The Master: I would ask them how they lost it.

Mr. O'Brien: Twenty-five per cent.

The Master: I would ask them quickly how they lost it.

Mr. O'Brien: Wouldn't you balk at once, and ask them?

The Master: Sure.

Mr. O'Brien: Wouldn't you go further and say, as you have said yourself about the Kings County Lighting Company, that they had an en- 38955
tirely unreasonable amount, I won't use the adjective you used, amount of unaccounted for?

The Master: Surely.

Mr. O'Brien: So that what I say is that according to the degree of study that one gives to it, the number of instances that you are connected with, the variety of instances and circumstances under which the gas companies that you have investigated have operated, that to the extent of that study and your own engineering or other

capacity, mechanical ability, experience acquired in years of actual work with gas concerns, or study and investigation into that, that to a certain degree, great or small, your opinion is worthy of serious consideration.

The Master: I do not think so. There is no use arguing that, you cannot convince me about it.

Mr. Clark: The very word unaccounted for shows they don't know very much about it, none of them do.

38957 Mr. O'Brien: Let me ask the witness a few questions, I don't know why you rule it out now, but in the last—

Q. Dr. Bemis, in your experience with the water department of the City, did you made a study of the topographical conditions of New York?

Mr. Ransom: Objected to.

A. Yes.

Q. The subterranean conditions of New York so far as they related to the work of that department?

A. Yes.

Q. Did you in your experience at Cleveland actually supervise the laying of mains?

38958 A. Yes.

Q. The installation of services?

A. Yes.

Q. The laying of mains to what extent?

A. Over 200 miles.

Q. The installation of services to what extent?

A. Over 40,000.

Q. Did you supervise and direct the work of the engineers of that department in Cleveland, Ohio, in all that work?

A. Yes.

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Q. Personally direct foremen in the carrying out of that work?

The Master: I think we have been all over that.

Mr. O'Brien: Well, of course, you will assume, I thought that your Honor would assume all of the things that his statement of his experience would justify you in assuming—

The Master: I am basing my ruling entirely upon the proposition that Dr. Bemis has never had the practical work of distributing gas and finding that he was losing a lot of gas and locating 38960
the leaks and finding out where the leaks were, and trying to keep his unaccounted for down.

Mr. O'Brien: Well, now, your Honor, let me say here, when it comes to determining whether the amount of leakage or the amount of the unaccounted for in a given company is excessive or not, the very term you use implies that you are going to compare that leakage or unaccounted for with some form, or some standard, with some experience of some other company.

The Master: I don't know whether I will or not.

Mr. O'Brien: Yes. 38961

The Master: I don't know whether I will or not.

Mr. O'Brien: How could you determine the statement of some man connected with the gas company that blank per cent is a reasonable amount?

The Master: Mr. O'Brien, I don't know.

Mr. O'Brien: Without some logic back of it, without some reasons being given in the way of explanation, it carries with it no conviction that it is a reasonable amount.

The Master: I will answer your inquiry, if you will let me. I don't know what witnesses you have, but if you have a witness who has ever had any practical connection with the distribution of gas on Manhattan Island, or with conditions at any place similar to conditions presenting themselves on Manhattan Island, who will say "I know what causes these leaks. I know what causes unaccounted for atmospheric conditions, leaks in joints, leaks in meters, slow meters and all the rest of it, and I have handled these things,
38963 and I have gone out and watched these leaks for a Gas Company, and if a Gas Company will attend to its meters and do this and do that," as Mr. Little has undertaken to say he can produce more gas in Astoria than Mr. Woods does, why, of course, I will take his testimony if in his opinion as an expert there ought not to be more than three, four or five per cent of unaccounted for, but I won't take Dr. Bemis' statement. Now, don't let us argue any more.

Mr. O'Brien: Well, this may not be lost time, your Honor, and I won't go back a third time with the argument, with tears in my throat, like
38964 my friend Moran, partner of Judge Ingraham—

(Discussion off the record.)

Mr. O'Brien: That will be all I will offer of matters tonight.

The Master: What are you doing, running my court? Telling me to adjourn now? Dr. Bemis has a lot of tables here and I am going to take them in tonight. Now, let us have them.

Mr. Chambers: No, there are not a lot.

The Master: Well, there are some tables. Have you any prepared, Dr. Bemis?

The Witness: I have about five.

The Master: They are ready now?

The Witness: One or two have gone in.

The Master: Are the others ready?

The Witness: There are not more than two or three others.

The Master: Are they ready?

The Witness: Yes.

The Master: Let us have them.

Q. Dr. Bemis, have you made—

The Master (interrupting): I understand perfectly, Mr. O'Brien, I do the same thing when I am trying a case, but in this particular case I 38966
am bound to give the other side a chance to look at these tables, and you might as well put them in now as tomorrow.

Mr. O'Brien: I do not want to take up a lot of time here, your Honor.

The Master: Well, get in your tables.

Mr. O'Brien: Where the doctor has made a study of the investment account.

The Master: The quicker you get them in, the quicker we will leave here.

Mr. O'Brien: The assumed investment account of the Astoria Company—

The Master: Give me the tables, any one he 38967
has made up.

Mr. O'Brien: Your Honor, there was a matter that he has prepared a statement on, but I won't go into it tonight, I will have to ask—

Mr. Ransom: I think any tables ought to go in.

The Master: I will enforce the rule that I won't take any tables after tonight.

Mr. O'Brien: Well, you are going to allow us to set up that other table tomorrow.

The Master: Based upon that voucher?

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Mr. O'Brien: Yes.

The Master: Is that all you are going to offer?

Mr. O'Brien: Yes, sir.

The Master: I will enforce the rule, if you do not put in those tables tonight, I won't take them tomorrow. I won't let you put in another table by Dr. Bemis unless it is put in tonight, except the one that I let you reserve earlier in the evening.

Mr. O'Brien: Well, I won't offer the—if you will permit me to open up that subject we were

38969 discussing now—

The Master: No, I won't take Dr. Bemis' statement on a highly technical proposition like unaccounted for gas, I won't do it.

Mr. O'Brien: Well, the force to be given to it is one thing, your Honor. The question is whether or not if a witness comes forward with an opinion, and he backs it up with argument or reasons that appeal to your judgment, your judgment will take it.

The Master: No, I do not think so.

Mr. O'Brien: Your mind is bound to assent to it.

38970 The Master: I do not think he has any basis anywhere at any time except—

Mr. O'Brien: Well, will you hear the premises from which he has drawn his conclusions?

The Master: No, I do not care what his premise is.

Mr. O'Brien: The conditions he takes into account?

The Master: No.

Mr. O'Brien: The studies he has made?

The Master: No, I am against you absolutely.

Mr. O'Brien: The inquiry that he has made?

The Master: I am aginst you absolutely. What is the use? As I was explaining to Judge Ransom in the conversation you overheard, I think I finally convinced him, I don't know whether I had or not, that an accountant's judgment of matters of accountancy and the related matters is a very good opinion, business men rely on it, but on a matter of this kind I am against you as I am against him on the other.

Mr. O'Brien: What would your Honor say of a distinguished, in quotation marks, "Utility Expert" who has worked in and supervised plants 38972
and in making plants and who appears in many rate-making proceedings and who appeared before your Honor in the role of an expert on depreciation, who has made affidavit that 17 per cent—plus leakage and unaccounted for, for a Gas Company, a certain Gas Company in New York City, is reasonable?

The Master: Well, don't let us discuss it. I have decided against you, Mr. O'Brien, on the question of Dr. Bemis' qualifications on unaccounted for gas.

Q. Doctor, have you made a study of and examination of the amount of money invested in the plant 38973
of the Astoria Light, Heat & Power Company?

A. Yes.

Q. You have made an investigation of the cost of the plants that is represented on the books of that company to those who are investors in that project?

A. Yes.

The Master: That is just Astoria?

Mr. O'Brien: Yes.

The Master: Well, wasn't it the Consolidated who were the investors?

Mr. O'Brien: Yes.

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Q. And what was the amount of money as per the books of that company paid for the stock of the company?

Mr. Ransom: Objected to, incompetent in form, not a proper method of proving that.

The Master: I am not interested in that at all. I will sustain that objection. Proceed. I have said—I understood Mr. Sangster had put in some tables indicating how much had been spent in the construction of that plant, didn't he?

Mr. O'Brien: He did not go beyond the books
38975 of account. He set up in his exhibit what the books assumed to show.

The Master: Yes.

Mr. O'Brien: And the questions that I am addressing to the witness have to do with the amount of money that was paid in as per the books. The amount of the surplus and reserve that that company has after paying dividends, which he will testify to, on certain amounts of capital for a given number of years.

The Master: I won't take it.

Mr. O'Brien: Well, that is a matter that I suppose—

38976 The Master: If you question—

Mr. O'Brien: It will clear—

The Master (interrupting): If you question the amount that the books show were expended for the construction of that plant, as Mr. Chambers has questioned the amount paid for the land, I will let you bring it out.

Mr. O'Brien: The point is to interpret the accounts as brought out by Mr. Sangster and show what the earnings of that plant have been and what quantity of earnings have gone into the surplus and reserve accounts.

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The Master: I don't care about that. If you have any proof as to what that plant is worth, what it cost to build, or anything of that kind, I will take it as bearing upon the price that the Consolidated pays for its gas.

Mr. Ransom: And I should object to that even.

The Master: I know you would.

Mr. Ransom: Because the Public Service Commission has fully investigated that and has authorized the capitalization of it, and these defendants cannot go back of that certification.

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Mr. O'Brien: But now we are going to ask the same thing—

The Master: Is that in this record?

Mr. Ransom: The fact that they did, yes.

Mr. Goetz: It is in the record.

Mr. O'Brien: The fact that the Public Service Commission may have approved at any time does not carry any weight in this proceeding.

Mr. Ransom: They checked the inventory, they checked the capitalization, they checked the expenditures.

The Master: Don't argue, go on.

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Mr. O'Brien: They make an application one week, and the next week have it granted. Can you assume then that there is any weight in an order made by a Public Service Commission that goes to the cost or the value of the property?

The Master: You heard me say what I would take over Mr. Ransom's objection. If you have any evidence at all that you want to offer bearing upon the investment or the value of the Astoria plant as affecting the amount that the Astoria Company charges to and the Consolidated Company pays the Astoria Company for gas made at that plant, I will take it.

Q. Dr. Bemis, were any dividends paid by the Astoria Light, Heat & Power Company during the seven years prior to 1914?

Mr. Ransom: I object to that as incompetent and immaterial.

The Master: Objection sustained.

Mr. O'Brien: Exception.

Q. What would the amount of dividends at 6 per cent be if paid during those seven years?

Mr. Ransom: I object to that on the same ground as previously.

38081 The Master: Objection sustained on the ground that it is immaterial.

Mr. O'Brien: Exception.

Q. Had these dividends been paid on the amount that you have estimated at 6 per cent for the seven years prior to 1914, have you calculated what the surplus would be with that amount deducted?

Mr. Ransom: I object to that as incompetent and immaterial.

The Master: Objection sustained.

Mr. O'Brien: Well, it is competent, what I have asked him to do in this question.

The Master: I have ruled it out as being im-
38082 material, Mr. O'Brien.

Mr. O'Brien: Exception.

Q. When was the capital stock of the Astoria Light, Heat & Power Company increased?

Mr. Ransom: I object to that as incompetent and immaterial.

The Master: Objection sustained as immaterial.

Mr. O'Brien: Exception.

Q. Has the Consolidated Company received at all times the interest upon its investment in the Astoria Light, Heat & Power Company?

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Mr. Ransom: Same objection.

The Master: I will make the same ruling, I do not think it is material.

Mr. O'Brien: Exception.

The Master: The only point that is material in my mind is, how much does it cost the Astoria Company to make its gas, and are they entitled to charge the additional items that are added to that basic cost?

Mr. O'Brien: Well, your Honor should understand just what in the case of the Astoria Light, Heat & Power Company, what is the amount of actual money put in, what that investment represents in dollars and cents to the investors, and what represents out of this alleged book investment surplus and reserve. 38984

The Master: No, I don't think that is material.

Mr. O'Brien: You need to know that in order to determine to that extent whether the price paid by the Consolidated Gas Company to the Astoria Light, Heat & Power Company for its gas is reasonable.

The Master: I don't think so, that is why I am ruling it out. I think the reasonable price to be charged by the Astoria Company to the Consolidated Company is the actual cost of making the gas, including in that cost taxes, insurance and other charges, and a reasonable return upon its plant and property used in making that gas. 38985

Mr. O'Brien: Reasonable return upon the plant, but your Honor should know, and I assume you want to know first whether the precentage of return should be 6 or 7 per cent, and secondly, whether the base upon which that 6 or 7 per cent is computed is $10,000,000 or $15,000,000.

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The Master: Yes, when you are talking about cost of the plant or its value, not where the money came from that built it. I don't care where the money came from that built it.

Mr. O'Brien: But, your Honor, if reserves have been set up for depreciation, if the investors having gotten back a return for every year upon that money, and there still remains this surplus of blank million dollars, as will be brought to your attention by the witness, then you have got to take that into consideration in order to determine to what extent the price paid by the parent

38087 company to one of its subsidiaries is reasonable.

The Master: No, I am against you.

Mr. O'Brien: Well, that matter I suppose can be brought out on the brief, or brought out on the argument, and that is why I refrain from putting in evidence a typed statement of the witness. It was not in proper shape to go in, and it is like many of these things that have come up in our presentation of the case. There may be matters that can be well covered by deductions from the evidence that is in.

The Master: There is only one thing about Astoria that will help me, if you have it, if you

38088 contest the Astoria figures, and that is whether the plant did not in fact, cost as much as the books show it did. Now, Mr. Chambers has shown that the cost of the land was $450,000, and not $750,000 as the books would indicate. Now, that may or may not affect the situation, dependent entirely upon how far I go in figuring value or cost, or cost as affecting value; but if the question depends upon cost, then Mr. Chambers has given me a very concrete illustration of an overcharge upon the books, so that if I am taking the cost I probably would be justi-

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fied in taking the $450,000 instead of the $750,000. Judge Ransom may disagree with that.

Mr. Ransom: I may bring out the fact.

The Master: If the books show that it cost $1,000,000 to put up Plant A, and you say it didn't, I would be glad to see it. If the books show that it cost $1,000,000 to put up Plant B, and that it cost $1,000,000 to put up Plant C, if the books show that plant to have a book value of $15,000,000 or $16,000,000 and you say it is not worth half that, I would like to hear it; but whether the money that went into it was 38990
profit, or reserves that came in in some other fashion, does not interest me in this case.

Mr. O'Brien: Well, there are internal evidences, assuming that the books are correctly kept, from which you can make deductions. You have announced a view that has ripened, I take it, into a conviction, that you should take in this case as to the Consolidated Gas Company the amount of stock that they paid on consolidation.

The Master: No, it has not ripened into a conviction at all, except to this extent, that I believe that the cost of the property to this company was the stock it issued for it. That is as far as 38991
my mind is fixed upon it.

Mr. O'Brien: Well, your Honor, can't you see compelling reason back of this proposition, that if this parent company pays a certain amount of money into the Astoria Light, Heat & Power Company, and it draws out 6 per cent interest upon that amount from year to year, and then roll up and hidden away over there blank million dollars of surplus, that that has got to go to the question of the price paid by the parent company to the subsidiary company for gas where it in-

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cludes the item of an estimated return upon the alleged investment?

The Master: Well, I can't see it at all.

Mr. O'Brien: Well, that is a matter for argument.

The Master: I think the situation is very close to the proposition of considering the Astoria plant as a Consolidated plant, finding out what it cost to make gas over there, and figure what it ought to cost on the basis of a fair return on that plant, whether that is done directly or done by
38993 way of a charge by the Astoria Company to the Consolidated Company. To my mind that doesn't make any difference.

Mr. Ransom: Are there any further tables?

The Master: I do not understand that Mr. O'Brien has any other tables except the ones that held back because of those vouchers.

Mr. O'Brien: I have a matter here, your Honor, that I was going to go into tomorrow morning. I would just as leave finish it tonight.

The Master: I wish you would.

Q. Dr. Bemis, have you made a study of the relation of cost, original cost of holders and building
38994 and equipment, to the capacity of gas represented by the send-out?

A. Yes.

Q. And in connection with what companies?

A. With many companies. The last investigation I made was covering the entire plant of the Peoples Gas Company of Chicago.

The Master: I don't get your point. You mean cost of building a plant?

Mr. O'Brien: Estimated cost.

The Master: Of building a new plant?

Mr. O'Brien: Yes, estimated cost of holders with respect to—

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The Master: Excluding land, I suppose?

Mr. O'Brien: Yes, and then buildings and equipment. It is a good deal after the question that you yourself put to the witness Little.

The Master: You mean manufacturing buildings and equipment?

Mr. O'Brien: Yes.

Q. Go ahead, Dr. Bemis?

A. Yes, I have made such studies. I had recently to go through the entire Peoples Gas Company of Chicago to determine the cost of their entire enormous plant.

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The Master: When was that plant built, Doctor?

The Witness: It gradually developed like the plant here, began about 1850, and coming on down to the present time. Most of it, of course, that is there now, has been put in since 1870. That is not true of the mains, but it is true of the works.

The Master: I am talking about the works and holders.

The Witness: The works, the buildings and the water gas sets and the holders have been put in we will say, since 1860. Nearly everything there has been put in since 1860, in the shape of buildings, and equipment of the buildings such as water gas sets, purifiers, etc., and holders, the same as here, for that matter.

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The Master: What was the latest date of any substantial improvement there?

The Witness: It was during the decade ending with the beginning of the war, and prices were about the same all through that decade on the average. I should say there were holders built during the latter part or the middle part

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of the decade, and some water gas sets added. This related almost entirely to the property as it was January 1, 1917. It was an investigation of the property now there that was there January 1, 1917, and it was property like this water gas sets—I am not including Astoria and 14th and 42nd Streets, it was like the 21st and 99th Street plants, like the holders, only it was a larger plant. They were not quite as big capacity holders, but a larger capacity in manufacturing plant, ninety-eight million cubic feet daily
38999 capacity of the water gas sets throughout the system.

The Master: That was the only plant you made that study in?

The Witness: No, I made that study in Washington and I made that study in St. Paul, and wherever I have had occasion to investigate these water gas properties, or coal gas either, for that matter.

Q. Have you gone into the question of the standards, the B. T. U. standard and the candle power standard?

A. Yes.

39000 Q. Have you taken part in the work of any Commission upon that subject?

A. I have represented the City of Chicago for three or four years on that matter.

Q. And apart from the fact that we have a statute here requiring a 22 candle power standard, which is a mandatory law, what is your opinion with respect to the candle power standard.

Mr. Ransom: I object to that as incompetent.

The Master: Objection sustained.

Mr. O'Brien: Because it is not definite, your Honor?

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The Master: No; because I won't take any proof of any opinion on that subject. We are dealing with a condition here created by a statute. I am not going to take any proofs as to what the witness's opinion is about it.

Mr. O'Brien: Were the question put by your Honor to the witness Little, supposed to be off the record and not part of the examination of the witness?

The Master: Oh, it is not material at all in this case. I have forgotten how it came about at that time. It was a pure matter of information.

Mr. O'Brien: It was examination by the Mas- 39002
ter.

Mr. Ransom: The witness volunteered such statements in connection with the cross-examination.

The Master: However it came about, the fact is that we have a statute that requires 22 candle power.

Mr. O'Brien: Well, I am glad to hear your Honor say that.

The Master: What did you expect I was going to do about it?

Mr. O'Brien: That examination of the witness made by you in reference to the matter was 39003
under such circumstances that it was pretty hard to say what my relation, or what the defendants' relation to it was. You asked the witness several questions that were not cross-examination, and he gave you answers to them.

The Master: What can I do about it? I can't do anything about that.

Mr. O'Brien: I could not see how you could do anything. The answer is what you said, it is the law. It is like prohibition, we are all railing against it, but it is the law. That is the way I

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feel about it, that we have a statute here, and a good many men have opinions as to how to get the most for the gas out of any law that regulates the making of gas.

The Master: All I can say about it is that I think Mr. Little is correct in his statement that it is for the benefit of the oil companies and is not for the benefit of the consumer, but that is the law.

Mr. Chambers: What, the candle power?

The Master: Yes. I think the people would be better off without that candle power requirement.

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Mr. O'Brien: I will suspend at this time with the witness, except as to the table that I will make complete when I get the vouchers that were asked for.

Mr. Ransom: Is it understood that there are no more tables?

Mr. O'Brien: No more tables.

Mr. Ransom: Or any further direct-examination of Mr. Bemis?

Mr. O'Brien: Well, I don't know of any now. If there is I will speak to your Honor privately and give you the subjects on which I wish to

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examine him.

The Master: You don't have to tell me privately. If it is something that you think you ought to have I am going to take it. I don't want to press you to death tonight, I am tired.

Mr. Chambers: I want to call Mr. Little.

The Master: What is this on, entirely new matter?

Mr. Chambers: Yes, I would say so.

The Master: Well, I won't say so. Let me hear what the subject is. If it is anything which was touched on in his examination, the direct, the

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cross, the re-direct or the re-cross, or whatever it is.

Mr. Chambers: The subject was.

The Master: Then I won't take it.

Mr. Chambers: Wait a minute.

The Master: Mr. Little, leave the stand. What is the subject matter?

Mr. Chambers: The number of open flame burners in existence in Manhattan and what he would say about candle power if he assumes that my number of open flame burners is correct, which I will prove, just that one question.

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The Master: What is that on, the question of the usefulness or wisdom of the law?

Mr. Chambers: Well, I would not say that. He would say whether it would be possible to dispense with candle power, assuming that number of open flame burners.

The Master: No, I won't take it. That is not useful in this case.

Mr. Chambers: Let me put the question.

The Master: No, I won't let you call the witness for the purpose stated.

Mr. Chambers: Let me put the question to him.

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The Master: No, I won't let you recall the witness for the purpose stated. I will give you an exception.

Mr. Chambers: I did recall him.

The Master: I refused to let you recall him, and I give you an exception.

Mr. Chambers: I wanted to recall him for the purpose of asking him if there were in the City of New York, the Boroughs of Manhattan and the Bronx, out of a total of 845,473 gas consumers in the Boroughs of Manhattan and the Bronx, 609,264 using flat flame burners?

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The Master what do you mean by flat flame burners?

Mr. Chambers: No, wait. 609,264 consumers were using 1,507,038 flat flame burners, and that the balance of 236,209 consumers were using incandescent mantle lights and electric lights—

The Master: If the 22 candle power statute were changed this would all be changed.

Mr. Chambers: No, with this number of consumers using flat flame burners you would have to have 22 candle power in the City.

The Master: But if you had some other standard you could change the burner, couldn't you?

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Mr. Clark: They would have to burn more gas to get that much light.

The Master: I am not going into it.

Mr. Chambers: I want to show by Mr. Little that if that is so—

Mr. Clark: You have already expressed yourself on it.

The Master: I did not, it was Mr. Little. I am not going to litigate here the wisdom of this statute.

Mr. Clark: The newspapers have tried one side of it.

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Mr. O'Brien: Your Honor, Alten S. Miller, in a matter now pending before Judge Greenbaum, an application of the Kings County Lighting Company for leave to present further testimony, to open their case, quoted the statement made by Mr. Little, and I submit that in fairness, if for no other reason, in fairness to the witness himself, he has been quoted in the public prints and quoted in that affidavit, it is no more than fairness that he be allowed to answer the question that Mr. Chambers wants to put to him about that matter.

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Mr. Chambers: I would like to do it.

The Master: No.

Mr. O'Brien: You see, he has been asked a question, and he is on record, and there is no chance to explain it unless he is asked this question, or similar questions. I think it is a fair proposition.

The Master: It may be fair, but I am not going to go into it in this case.

Mr. O'Brien: But, your Honor, there is a statement made there, and it is going into the record. Will you strike out the statement from the record made by the witness Little as to candle power?

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The Master: No.

Mr. O'Brien: Well, you have said that it was not material in this case.

The Master: I won't strike it out.

Mr. O'Brien: Do you consider it immaterial? Will you say that on the record?

The Master: No, I won't say it either way. I do say that I do not see that this legislation can be affected.

Mr. Clark: I offer in evidence letter dated November 30, 1917, signed by R. A. Carter, vice president of the Consolidated Gas Company, to the Public Service Commission for the First District, 120 Broadway, New York City.

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Mr. Chambers: You don't dispute the signature, do you, Mr. Ransom?

The Master: No, of course, he does not.

Mr. Ransom: I do not.

The Master: You offer this letter in evidence?

Mr. Clark: I do.

Mr. Ransom: I object to it as immaterial and incompetent, no bearing on any issue in this case.

The Master: Objection sustained.

39017 Mr. Clark: Exception.

Mr. Chambers: That is, you will not let us show the admission by the company of how many open-flame burners are used?

Mr. Chambers: It becomes very material this statute.

Mr. Clark: It has already been put in evidence. You have expressed yourself to the effect that this is a fool statute, and asked Mr. Little about it.

The Master: I based it on Mr. Little's testimony.

Mr. Clark: You opened the question, you
39018 opened the issue, and it has been tried in the newspapers.

The Master: This case is going to be finished upon the issue of this case. If Mr. Little is in town when this case is completed, and I can let Mr. Little explain the statement that he made for his own protection on the record, I am going to let him do it, but I am not going to let it go in now.

Mr. O'Brien: If he is not in the City will you receive an affidavit from him to that effect?

The Master: No, I won't do that, because Judge Ransom might want to cross-examine him
39018 on the explanation that he then wants to make.

Mr. Chambers: Your Honor, I think that letter is very material.

The Master: I am not going to take it at this time. That is all there is about it. If this case is quickly disposed of, and we can spare a few minutes to let Mr. Little explain the statement he made, then I may let him do it. I am inclined to do it, because I see where perhaps he may be annoyed by being faced with this statement, and may want to cover himself.

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Mr. O'Brien: He is right here now, and he may not be here later.

The Master: I don't want to do it now.

Mr. O'Brien: I think an unfair advantage has been taken by a witness in another case, who has given that statement without any explanation.

The Master: I am not worried about Judge Greenbaum's troubles.

Mr. O'Brien: I think in fairness to the witness, he has some rights in a Court of Equity, and your Honor asked him the question.

The Master: I am going to dispose of it on a strictly legal basis, if I cannot do it any other way. I let Mr. Chambers recall Mr. Little after I said I would not permit any more re-direct. That was the time to cure this. It is now too late.

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Mr. Chambers: It was new discovery.

Mr. O'Brien: I except to your Honor's refusal to permit us to do that.

Adjourned to Wednesday, February 18, 1920, at 10 A. M.

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